

SICOL

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**Proceedings of the Second International
Conference on Oceanic Linguistics:
vol.2, Historical and descriptive studies**



**Pacific Linguistics
Research School of Pacific and Asian Studies
The Australian National University**

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Table of contents

<i>Contributors to this volume</i>	vii
<i>Preface</i>	ix

Part 1: Proto Oceanic studies

1	Star, wind, and wave: searching for early Oceanic navigation terms Meredith Osmond	3–35
2	Where did <i>suli</i> come from? A study of the words connected to taro plants in Oceanic languages Ritsuko Kikusawa	37–47
3	The true prepositions/casemarkers in Proto Oceanic Joseph C. Finney	49–78

Part 2: Languages of Melanesia

4	Sit, stand, lie: posture verbs and imperfectives Robert Early	81–103
5	‘Come’ and ‘go’ in Kilivila Gunter Senft	105–136
6	Roviana clauses Evelyn M. Todd	137–154
7	Linguistic subgrouping in Vanuatu and New Caledonia John Lynch	155–184
8	How did Erromangan verbs get so messy? Terry Crowley	185–199
9	‘Adjectives’ in Tamambo, Malo: syntactic variation, semantic and discourse correlation Dorothy Jauncey	201–229

- | | | |
|-----------|--|---------|
| 10 | Some Raga vocabulary for terrestrial invertebrates, reptiles and mammals of North Pentecost
D.S. Walsh, Richard Leona, Wendy Pond | 231–260 |
| 11 | Postmodification and the structure of relatives in Nêlêmwa and other Kanak languages of New Caledonia
Isabelle Bril | 261–284 |
| 12 | Un exemple de morphosyntaxe en Nengone (Nouvelle-Calédonie): les variations morphologiques et la transitivité
R. Davel Cawa | 285–293 |

Part 3: Central Pacific languages

- | | | |
|-----------|---|---------|
| 13 | Two be's or not two be's? On the copulas of Wayan Fijian
Andrew Pawley | 297–314 |
| 14 | The dialects of the Yasawa Islands of Fiji
Geraldine Triffitt | 315–327 |
| 15 | <i>Kuhane</i> and <i>'aitu</i> . Two cognate Polynesian terms which exclude each other
Horst Cain and Annette Bierbach | 329–361 |
| 16 | <i>Cia</i> -words in Tokelauan
Even Hovdhaugen | 363–368 |
| 17 | Ergative case avoidance in East Futunan (Efu)
Claire Moyse-Faurie | 369–380 |
| 18 | <i>Gahua he tohi vagahau Niue</i> : Niue dictionary project: orthography and vowel quality
Wolfgang B. Sperlich | 381–395 |
| 19 | The discontinuous member of the continuous duo in Maori
Deanne Wilson | 397–408 |

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Preface

In response to the growing need for a conference dedicated to Oceanic linguistics and related topics, the First International Conference on Oceanic Linguistics (FICOL) was held in July 1993 at the University of the South Pacific Vanuatu complex. The conference was a great success, attracting some 60 participants from around the world, leading to a volume of proceedings published by Pacific Linguistics in 1997, and becoming the first in a continuing series of conferences devoted to language in the Oceanic region.

The second of these conferences was held in Suva, Fiji, at the Laucala Bay campus of the University of the South Pacific from July 3 to 7 1995. This Second International Conference on Oceanic Linguistics (SICOL) was again a great success, and again attracted participants from around the world – more than 50 in total. Papers presented at the conference reflected the diversity of languages spoken in the region, and the considerable range of research on those languages. A number of papers were published by Pacific Linguistics in 1998 in *SICOL. Proceedings of the Second International Conference on Oceanic Linguistics: vol.1, language contact*, edited by Jan Tent and France Mugler.

The majority of papers presented at SICOL dealt specifically with the Oceanic branch of the Austronesian family. These ranged from descriptive studies of the morphology, syntax or lexicon of individual languages; through work on subgrouping; to aspects of Proto Oceanic. Nineteen of these papers have been assembled to comprise this second and final SICOL proceedings volume. These have been grouped into three sections. The first of these, Proto Oceanic studies, is self explanatory. The next section, Languages of Melanesia, comprises papers on languages from New Caledonia, Vanuatu and Solomon Islands, as well as Oceanic languages of PNG. The third section, Central Pacific languages, includes studies in Fijian and Polynesian languages. Oceanic languages remain a field rich in research waiting to be done. We present this collection of papers in the hope that it will inspire further work in this field.

We are grateful to the University of the South Pacific and its School of Humanities for the financial support that made SICOL possible, and to the staff at Pacific Linguistics for their efforts in producing this volume of proceedings.

Bill Palmer

Paul Geraghty

1 *Star, wind, and wave: searching for early Oceanic navigation terms*

MEREDITH OSMOND

1 Introduction

For as far back as the four or five thousand years that we can trace them culturally, Austronesian speakers have preferred to live close to the sea. They have typically been sailors and fishermen. For as long as their settlements were confined to south-east Asia and north-west Melanesia, virtually all their sailing would have been between intervisible or near intervisible islands. However, about 1500 BC, a group of Austronesian speakers living somewhere in the region of the Bismarck Archipelago¹ began to move out eastwards, to the Solomons and beyond. Over the next few hundred years, their descendants explored and settled many of the major island groups of the south-western Pacific. Earliest movements as roughly dated by Lapita finds are: Santa Cruz and Vanuatu both ca. 1200 BC, Fiji and Tonga 1200–1000 BC (Kirch 1997:267–273).

Building on the experience of their Austronesian ancestors in island south-east Asia, and aided by an increasingly sophisticated canoe-building technology,² these ocean navigators accumulated a body of knowledge that enabled them to sail freely beyond sight of land while retaining their orientation of home. As Irwin (1992) has persuasively argued, even purely exploratory voyages into unknown waters were guided by knowledge of the prevailing wind system, ensuring that any push eastwards against the prevailing wind carried with it a good chance of a safe return.

More complex skills had to be brought to bear once new island groups were settled, a development which typically involved some regular trafficking between the old homeland and the new. These skills lay in recognising and memorising the regular patterning of

¹ That is, speakers of a language now referred to as Proto Oceanic.

² See Pawley and Pawley (1998)

naturally occurring phenomena such as star movements, wind systems, currents and swells as they applied to each new sea route, and in developing strategies that could be used in the committing to memory of these features.

The best scholarly minds of Europe had spent centuries developing ways of representing a curved world on a flat map and ways in which explorers could locate changing positions on their flat maps by using compass, sextant, chronometer, almanacs and various mathematical tables. When Europeans first ventured into the Pacific they had to grapple with the almost inconceivable notion that Pacific Islanders could navigate their canoes successfully over distances sometimes as great as a thousand miles without benefit of compass or chart or in fact any aids beyond what they held in their heads and what they could sense. In the mid-1960s, David Lewis, an experienced ocean yachtsman, aware that in some parts of the Pacific this skill was still practised, determined to seek out any remaining old-time navigators and sail with them where possible, to try to comprehend and record their navigational strategies. His resulting book, *We, the navigators* (1972), is the most complete record we are likely to get of this body of knowledge, rapidly disappearing with the increased presence of motorised boats and Western navigational technology. He was also at pains to record, in the languages of the navigators themselves, the names of the physical features on which they relied, the stars, different kinds of wave movements and so on. He took particular care to describe and name concepts for which Western navigation theory lacks any equivalent. He has thus provided us with an (admittedly small) list of words from Puluwat and Kiribati in Micronesia, Ninigo in the Western Admiralties, and a number of Polynesian languages, principally those of Tonga and Tahiti, and two Polynesian outliers, Pileni, in the Santa Cruz group, and Tikopia.

The purpose of this paper³ is to reconstruct the earliest possible Oceanic words from which are descended existing terms and meanings associated with the semantic field of navigation (largely as defined by Lewis 1994). For the most part they are terms of the physical world, of the night sky and the ocean seascape. Also explored are terms such as the Polynesian *kaveya* (star or other object for which one steers) and the Micronesian *etak* (a 'moving' reference point) which refer to concepts incompatible with Western navigation theory. For some of these we may be able to offer a Proto Oceanic (POc) origin. Undoubtedly, as navigation skills developed and were refined in the Pacific, new terms would have been required, or old meanings extended. There is a further complication in that we are not dealing with one homogeneous environment. Take just one example – the night sky. There is no change to the night sky as one travels east or west apart from changes to the times of star rise and star set. But the sky visible from the northern hemisphere is a different sky from that of the southern hemisphere. That part of the globe which we are concerned with here extends from roughly 15°N (Saipan) to 20°S (Tonga), with the presumed POc homeland in the Bismarck Archipelago lying just a few degrees south of the Equator. Similarly, the patterning of winds, currents and swells varies with latitude and with distance from land mass, ocean depth etc., as well as with the seasons.

Two papers, Malcolm Ross's *Proto Oceanic terms for meteorological phenomena* (1995) and Jeff Marck's *Proto Micronesian terms for the physical environment* (1994), skirt closely the subject matter of this paper. The former could in large part have been subsumed within the broader topic of navigational terms. However, the breadth and

³ This paper has been written under the auspices of the Oceanic Lexicon Project being undertaken within the Research School of Pacific and Asian Studies at the Australian National University under the direction of Andrew Pawley and Malcom Ross. Thanks are due to both, and to Jeff Marck, for their advice in the writing of this paper.

complexity of the topic of meteorological phenomena, particularly winds, have warranted separate treatment. Accordingly I have simply incorporated Ross's reconstructed POc wind terms in this paper without including his supporting evidence.

Subgrouping assumptions on which POc reconstructions are based, together with sound correspondences, have been detailed in earlier papers written as part of the Oceanic Lexicon Project.⁴ In brief, three primary subgroups⁵ are assumed: Admiralties and St Matthias (Adm), Western Oceanic (WOC) and Eastern Oceanic (EOc). Cognates from any two of these are regarded as sufficient justification for a POc reconstruction.

The Admiralties–St Matthias subgroup is treated for present purposes as having no internal subgrouping. The Western Oceanic subgroup consists of North New Guinea (NNG), Papuan Tip (PT) and Meso-Melanesian (MM) clusters. Etyma, which occur only in PT and NNG, are attributed to Proto New Guinea Oceanic (PNGOC). The Eastern Oceanic subgroup is assumed to consist of S.E. Solomonian (SES), North/Central Vanuatu (NCV), South Vanuatu (SV), New Caledonia (NCal), Nuclear Micronesian (Mic) and Central Pacific (CPa), the latter divided for convenience into Fijian (Fij) and Polynesian (Pn). Reflexes within any two of the EOc clusters are regarded as sufficient to justify a PEOc reconstruction.

Reconstructions for Proto Austronesian (PAn) and Proto Malayo Polynesian (PMP) have been taken from Blust's Austronesian Comparative Dictionary file (ACD). Reconstructions have also come from Bruce Biggs' Polynesian Lexicon (Pollex) file at the University of Auckland.

Within the cognate sets below, each language name is identified by its subgroup. Unless otherwise sourced, terms and glosses are from the dictionaries listed in the references. It should be pointed out that terms taken from the literature on navigation are often spelt in non-standard ways. Wherever possible, spelling has been checked against dictionary sources.

2 Reconstructions

2.1 Heavenly bodies

To early Oceanic navigators, as to the Arabs, the Phoenicians, the Vikings and other early navigators, the fundamental sources of position finding were the heavenly bodies.

Sky, heavens

The most soundly based reconstruction for sky is POc **lanjit*. In some Oceanic languages its meaning has been extended to include weather, apparently both as a general category and as a specific reference to kinds of weather, rain, wind, etc.

PAn **lanjiC* 'sky' (Dempwolff 1938)

PMP **lanjit* 'sky'

POc **lanjit* 'sky'

Adm:	Tench	<i>raŋiti</i>	'rain'
Adm:	Titan	<i>lan</i>	'sky, heaven'
NNG:	Manam	<i>lan</i>	'sky, heavens'

⁴ See Ross (1996) and Osmond (1996).

⁵ Abbreviations used throughout the paper are as given here.

NNG:	Hote	<i>len</i>	'heaven, sky; air'
MM:	Bali	<i>laniti</i>	'sky'
MM:	Tigak	<i>lanit</i>	'rain'
MM:	Nehan	<i>lanit</i>	'sky'
MM:	Haku	<i>lanjic</i>	'rain; sky'
SES:	Kwaio	<i>lanj</i>	'sky, heaven'
SES:	Arosi	<i>ranj</i>	'rain'
Mic:	Marshallese	<i>lanj</i>	'sky, heaven; weather'
Mic:	Woleaian	<i>lanj</i>	'sky; typhoon, rainstorm, wind'
Fij:	E. Fijian	<i>lomā/lanj</i>	'sky, heavens' (<i>lomā</i> 'the inside')
Pn:	Tongan	<i>lanj</i>	'sky, heavens'
Pn:	Samoa	<i>lanj</i>	'sky, heavens'

The sky was typically conceptualised as something spanning a flat world from horizon to horizon. In both Micronesia and Polynesia it was regarded as a dome or a series of domes resting on the earth and forming concentric horizons on its surface (Lewis 1978:121). In Kiribati the heavens, *karawa*, could be subdivided into a lower heaven of birds and clouds where things appear small, *karawa merimeri*; and a heaven of the stars, *karawa uatao*. Tongans identified both *lanj*, the sky, and *vavā*, which was the space between earth and sky. Some communities referred to the sky in legendary terms, conceiving it, for instance, as the home of the ancestors or of the Polynesian demigod, Maui.⁶ Micronesians referred in their legends to Kachaw, the sky world. Goodenough has reconstructed PMic **ka-dawa* 'heaven, sky' (Trukese *kachaw*, Ponapean *kataw*, Kosraen *kuhsra*, Kiribatese *karawa*). He points out that the root **dawa* matches up in regular sound correspondences with Fijian *dawa* 'to cross from one place to another, as by a bridge'. Its transitive form, *dawaka*, is glossed as 'to extend as far as', which Goodenough (1986:556) suggests contains the underlying idea of bridging or spanning (from horizon to horizon). For a Kiribatese navigator, however, the night sky was a vast roof. He never called it *karawa*, the usual Micronesian term for the heavens, but referred to it as *uma ni borau* 'the roof of voyaging' (Grimble, A. 1931:197).

Horizon

The line where sea meets sky is commonly referred to by a compound – either edge/walls/base of sky, edge of sea, or similar. I have located two sets of cognates, one limited to Polynesia, the other to Micronesia.

PPn **tafa(tafa)(ki)lanj* or **tafaqa-ki-lanj* 'horizon' (**tafa* 'side, edge', *lanj* 'sky')

Pn:	Tongan	<i>tafa(tafa)-?aki-lanj</i>	'horizon'
Pn:	Samoa	<i>tafa-tafa-?ilanj</i>	'horizon'
Pn:	E. Uvean	<i>tafa-?aki lagi</i>	'horizon, limit, edge'
Pn:	Maori	<i>taha(a)ranj</i>	'horizon'
Pn:	Tikopia	<i>tafa-tafā-ranj</i>	'horizon'
Pn:	Tokelauan	<i>tafa-tafālagi</i>	'horizon'

⁶ For instance, a Kiribati creation myth describes how the face of heaven was originally like hard rock stuck to the earth, but was prised apart and then held up by four women, who became like mighty trees (Grimble, R. 1972:39-41). The legend is echoed in Hawaii, where the sky dome is supported by four pillars, and in Tahiti, where the sky rests on ten pillars (Makemson 1941:199).

PWMic **pailani* 'horizon' (Marck 1994)

Mic:	Mortlockese	<i>payilén</i>	'horizon'
Mic:	Satawalese	(<i>p</i>) <i>payilen</i>	'horizon'
Mic:	Puluwatese	<i>yóró/ppáálan</i>	'horizon'
Mic:	Trukese	<i>óroppeyinen</i>	'horizon' (<i>oroppa</i> + <i>neni</i> 'rim of heaven')

Two S.E. Solomonian languages describe the horizon in terms of the sea rather than the sky. Lau and Kwaio both have *?aena asi*, literally 'foot, leg of the sea'. Other terms retain the more usual second element meaning 'sky' but vary the first element:

PT:	Motu	<i>guba dokona</i>	'horizon' (<i>guba</i> ⁷ 'sky', <i>doko</i> 'end')
SES:	Lau	<i>?aena salo</i>	'horizon' (<i>?aena</i> 'foot', <i>salo</i> ⁸ 'sky')
SES:	Arosi	<i>wa?a-ni-aro</i>	'horizon' (lit. 'beginning of the sky')
Mic:	Trukese	<i>epi-nen</i>	'horizon' (<i>epi</i> - 'bottom', <i>neni</i> 'sky')
Mic:	Marshallese	<i>kapin lan</i>	'horizon' (<i>kapi</i> 'bottom', <i>lan</i> 'sky')
Mic:	Kosraen	<i>pe kuhsra</i>	'horizon' (<i>pe</i> 'side', <i>kuhsra</i> 'sky/ heaven')
Mic:	Kiribatese	<i>te tatanja ni mainiku</i>	'eastern horizon' (lit. 'roof-plate of east') (Grimble, A. 1931:198)
Mic:	Kiribatese	<i>te tatanja ni maeao</i>	'western horizon' (lit. 'roof-plate of west') (Grimble, A. 1931:198)
Fij:	E. Fijian	<i>vū-ni-lanji</i>	'horizon' (lit. 'base of sky')
Fij:	Wayan	<i>vū-ni-lanji</i>	'horizon'
Pn:	Hawaiian	<i>kumu-lani</i>	'horizon' (lit. 'base of sky')
Pn:	Hawaiian	<i>pō?ai-lani</i>	'horizon' (lit. 'sky circle')
Pn:	Hawaiian	<i>kūkulu-o-lani</i>	'horizon' (Åkerblom 1968:15) (<i>kūkulu</i> 'pillar, post, side, edge, horizon' is used to denote the four pillars which were the principal supports of the heavenly dome (Makemson 1939:19)

It is a peculiarity of Kiribatese that features of the sky are typically referred to in terms of roof parts. This is because instruction in navigation was traditionally carried out in the *maneaba* or meeting house, with the great roof substituting for the sky. The night sky was *uma ni borau* 'the roof of voyaging'; the eastern and western horizons were *tatanja*, the term for the two large horizontal beams on which the rafters are placed; the meridian was marked by *taubuki* 'ridge of house roof' with the spot at which it was supported by a central pillar indicating the position of the zenith star, Rigel. The roof framework was a network of named criss-crossing rafters which served as a kind of grid reference that could, in the imagination, be transferred to the night sky. A Kiribatese navigator could thus estimate and identify altitudes of stars within a degree of two (Grimble, A. 1931:197-8).

⁷ From PNGOc **guba(r,R)* 'storm cloud', but in at least two Papuan Tip languages, Motu and Mekeo, meaning has become generalised to 'sky'.

⁸ Reflexes of Poc **qaRoq* 'clouds' (generic) typically serve as the term for sky in South-East Solomonian languages.

Sun

The sun is the main direction indicator during daylight, but its position must be related to the time of year. Actual points of sunrise and sunset move over a horizontal arc that gets progressively larger the further one is from the equator. Åkerblom (1968:15-17) and Makemson (1941:85) offer linguistic and archaeological⁹ evidence of Polynesian familiarity with the sun's apparent annual movement, a familiarity that it would be necessary in any event to presuppose to explain navigators' facility in using the sun as a bearing indicator. Polynesians have terms for the ecliptic – the path along which the sun appears to move over a year. For the Pukapukans, it was *te ala o te la*, literally 'the path of the sun'. Hawaiians called it *ke ala ula a ke kuʻukuʻu*, 'the bright road of the spider'. Hawaiian terms have been recorded for the sun's southern limit, *ke alanui polohiwa a Kanaloa*, literally 'the black-shining road of Kanaloa', and for its northern limit, *ke alanui polohiwa a Kane*, literally 'the black-shining road of Kane'.¹⁰ In Pukapuka, the terms for the solstices were *lua poto* 'short pit' and *lua loa* 'long pit', phrases which Beaglehole suggests refer to the short days of winter and the long days of summer respectively. Tahiti has corresponding terms – *rua poto* and *rua maoro*. The Maori use the one term, *mārua roa* 'long pit' for both solstices, and apply the term also to the month or season during which the sun is at its furthestmost points (Makemson 1941:85). The only Micronesian terms I have located have been recorded in a Gilbertese myth by Arthur Grimble, in which a tree, *Kai-n-tiku-aba*, whose right side is *te-au-meanj* 'northern solstice' and left side is *te-au-maiaki* 'southern solstice', springs from the spine of *Na Atibu* (Grimble, R. 1972:43). In his Gilbertese dictionary, Sabatier (1971) defines *au* as 'used to indicate sun's position north or south of the equator'; *meanj* is the directional 'north' and *maiaki* 'south'.

At its highest point each day the sun is also an accurate indicator of due north (unless you happen to be at the particular latitude for which the sun is then directly overhead). As Lewis (1994:384) points out, the north-south axis can be accurately ascertained at noon by the shadow of a vessel's mast, which points either due north or south depending on the latitude and the season.¹¹

Reconstruction of a POc term for the sun itself is not clearcut. Blust has reconstructed PAN **qajaw* or **qalejaw* as 'day', with POc **qajo*, also 'day'. In this he has revised both the form and meaning of Dempwolff's (1938) reconstruction PMP **ha(ŋ)gav* 'day, sun'. However, there is evidence both within and without the Oceanic region that the two senses of 'day' and 'sun' were commonly interchanged, with 'sun' being primary in Oceanic.

PAN **qajaw* or **qalejaw* 'day' (ACD)

PMP **ha(ŋ)gav* 'day, sun' (Dempwolff 1938)

POc **qaco*¹² 'sun, day'

Adm: Ponam *al* 'sun'

Adm: Mondropolon *al* 'sun'

⁹ Through identification of probable solar observation sites on, for instance, Mangareva and Easter Island. (Åkerblom 1968:17)

¹⁰ Kane and Kanaloa were important gods in the Polynesian pantheon, Kane being associated with light, Kanaloa with darkness. (Makemson 1941:21)

¹¹ Through measurement of the angle by which the position of the sun at midday differs from the vertical, the sun can also be a precise indicator of latitude. This latter property, although depended upon by Western navigational technology for a daily position fix, would have been of less use to canoe navigators whose main need was regular bearing indicators.

¹² In the standardised orthography used in the Oceanic Lexicon Project, Blust's /j/ is written as /c/.

PT:	Molima	<i>?asu</i>	'sun'
MM:	Nakanai	<i>haro</i>	'sun; day; good day'. (However this example gives food for thought – Nakanai also has a more specific reference to the sun as <i>la-mata-la-haro</i> 'the eye of the day: the sun' (Johnston computer file in progress), which suggests that 'day' is its primary meaning.)
MM:	Tigak	<i>ias</i>	'sun' (NB (<i>gan</i>) <i>ias</i> 'daytime')
MM:	Nalik	<i>ias</i>	'sun'
SES:	Bugotu	<i>aho</i>	'sun'
SES:	Gela	<i>aho</i>	'sun; good weather; put in the sun; experience good weather'
SES:	Lau	<i>sato</i>	'sun'
SES:	'Are'are	<i>rato</i>	'sun, sunshine, no rain, good weather'
SES:	Sa'a	<i>sato</i>	'sun, sunshine, fine weather'
NCV:	Mota	<i>loa</i>	'sun'
NCV:	Lonwolwol	<i>jal</i>	'sun'
NCV:	Paamese	<i>ealo</i>	'sunshine'
NCV:	Namakura	<i>?al</i>	'sun'
Mic:	Marshallese	<i>hal</i>	'sun'
Mic:	Woleaian	<i>yalo</i>	'sun'
Mic:	Puluwatese	<i>yalet</i>	'sun'

In Polynesia, reflexes of POc **qaco* are restricted to the sense of 'day, daylight' rather than 'sun' (Hawaiian, Maori, Rarotongan, Samoan, Tahitian *ao* 'day (not night)'; Samoan *aso*, Tuvaluan *aho* '(24 hour) day').

A second term, POc **raqan*, shows a similar blurring of meaning, with the S.E. Solomonic reflexes referring primarily to sunlight, the Micronesian unequivocally to day, and the Polynesian equally unequivocally to sun:

PAnc **daqani* 'day' (ACD)

POc **raqan* 'sunlight, sun, day'

SES:	Lau	<i>rā</i>	'sunlight'
SES:	Arosi	<i>rā(na)</i>	'sunshine'
Mic:	Marshallese	<i>rān</i>	'day, date'
Mic:	Ponapean	<i>rahn</i>	'day'
Mic:	Puluwatese	<i>ráán</i>	'day'
Mic:	Woleaian	<i>ran</i>	'day, date'

PPn **laqā* 'sun'

Pn:	Tongan	<i>la?ā</i>	'sun'
Pn:	Samoan	<i>lā</i>	'sun'
Pn:	Maori	<i>rā</i>	'sun'
Pn:	Tahitian	<i>rā</i>	'sun'
Pn:	Rapanui	<i>ra</i>	'sun'

Yet another contender for the POc term for sun is **sinaR*, which Blust (1998) glosses as 'shine'. While evidence from New Ireland, parts of the S.E. Solomons and Micronesia

support this meaning, reflexes from Western Oceanic, the Admiralties and other parts of the S.E. Solomons lean towards the meaning 'sun'.

PMP **sinaR* 'ray of light' (Dempwolff 1938)

POc **sinaR* 'shine (Blust 1998), sun'

Adm:	Mussau	<i>sinak(a)</i>	'sun'
Adm:	Tenis	<i>sinak(a)</i>	'sun'
Adm:	Lou	<i>sinsin</i>	'sun'
PT:	Motu	<i>dina</i>	'sun; day'
MM:	Lavongai	<i>sinaŋ</i>	'sun; (sun) shine'
MM:	Tigak	<i>sinaŋ (siŋan)</i>	'(sun) shine'
SES:	Lau	<i>sina</i>	'to shine, give light'
SES:	Kwaio	<i>sina</i>	'sun'
SES:	'Are'are	<i>sina</i>	'to shine, brighten; light, brightness'
SES:	Sa'a	<i>sineli</i>	'to shine'
SES:	Arosi	<i>sina</i>	'sun'
NCV:	Mota	<i>siŋa</i>	'to shine'
Mic:	Trukese	<i>ttina</i>	'shine, ray, brightness, beam'
Mic:	Puluwatese	<i>tin</i>	'shine, as the sun'
Mic:	Mortlockese	<i>tin, tina-</i>	'shine: used for fire, moon, lantern'
Mic:	Satawalese	<i>(t-)tin</i>	'shine, ray, brightness, beam'
Fij:	Rotuma	<i>sina</i>	'light, lamp, star'
Fij:	E. Fijian	<i>siŋa</i>	'day, daylight, sun'
Fij:	E. Fijian	<i>ðina</i>	'lamp, torch'

Building on its 'to shine' meaning, POc **sinaR* has given rise to a number of Polynesian terms which, with the addition of *mā* – a stativising prefix – refer to the moon:

PPn **mā-sina* 'moon'

Pn:	Rennellese	<i>māsina</i>	'moon, month'
Pn:	Tongan	<i>māhina</i>	'moon'
Pn:	Samoan	<i>māsina</i>	'moon, month'
Pn:	E. Futunan	<i>māsina</i>	'moon, month'
Pn:	E. Uvean	<i>māhina</i>	'moon'
Pn:	Maori	<i>māhina</i>	'moon'

Moon

The moon is of little value as a navigational aid. Its typical role is as a marker of periods of time. Reflexes of POc **bulan* (from Dempwolff's PMP **bulan*) 'moon' are widespread throughout the Western Oceanic region, the Admiralties, Vanuatu and Fiji. In Polynesia the term has become verbal (PPn **pula* 'to glow'), and the moon is referred to by reflexes of an Eastern Oceanic term PEOc **marama*, which are found in the S.E. Solomons (Lau *madama*), and throughout Micronesia (Mokil, Ponape, Puluwat, Truk *maram*) and Polynesia (Tahiti, Tikopia, Rarotonga *marama*), all 'moon'.

Stars

Although the sun serves as a direction marker, particularly at sunrise, noon and sunset, the stars are the critical signposts in guiding navigators across open sea. The age-old method of star navigation consists in laying a course direct to a given destination by keeping the bow of the vessel pointed towards a star near the horizon whose bearing corresponds to the direction of the destination, that is to say along a great circle route. As one star rises higher or sets, another of similar declination will be selected to take its place. For this purpose, the stars have obvious advantages over the sun. In the first place, the apparent movement of the stars is more stable than that of the sun. Although they rise each night four minutes earlier than on the previous night, they do so always at the same point on the horizon relative to a stationary observer. Second, the number and position of significant stars or star groups is on a scale that permits virtually an unlimited number of sequential stars or 'star paths' to be identified and memorised. Third, familiarity with the night sky as a whole can mean that even if the night is cloudy, the appearance of only a few stars can orient a skilled navigator.

It has already been pointed out that the northern hemisphere sky differs from that of the southern hemisphere. Polaris, for instance, that significant pointer of the northern sky, drops out of sight as one reaches the Equator. However, there are many stars common to a band of sky visible between, say, 15°N and 15°S, an area which includes New Guinea and its islands; almost all of Micronesia; the Solomons; northern Vanuatu; and part of Polynesia including the northern Cook Islands, Tuvalu and Tokelau but not Fiji or Tonga. Some star groups including the Southern Cross and its Pointers, the Pleiades, Orion's Belt and the triangle which Westerners refer to as Taurus are also recognised and named as units by Oceanic people. Many other patterns in the sky have been identified and named by them according to familiar shapes or to illustrate legends. I have reconstructed the following terms for stars and star groups. All known cognate sets are included, as well as other terms that carry information about the significance of particular stars to the naming community.

Star (generic)

PAn **bituqen* 'star' (ACD) (PMP **bi(t)uhen* 'star' (Dempwolff 1938))

POc **pituqon* 'star' (ACD)

Adm:	Titan	<i>pítuy</i>	'star'
NNG:	Lukep Pono	<i>pitiki</i>	'star'
NNG:	Takia	<i>patui</i>	'star'
PT:	Misima	<i>pútum</i>	'star'
PT:	Motu	<i>hisiu</i>	'star'
MM:	Nehan	<i>pitopit</i>	'star'
SES:	Arosi	<i>hi?u</i>	'star'
NCV:	Mota	<i>vitu</i>	'star'
NCV:	S.E. Ambrym	<i>hitu</i>	'star'
Mic:	Kiribatese	<i>itoi</i>	'star, constellation'
Mic:	Woleaian	<i>fiusiu</i>	'star'
Mic:	Puluwatese	<i>fúú</i>	'star; point of the compass; canoe course plotted by the stars'
Mic:	Marshallese	<i>iju</i>	'star'
Mic:	Mokilese	<i>uju</i>	'star'
Mic:	Ponapean	<i>usu</i>	'star'

Fij:	Rotuman	<i>hefu</i>	'star'
Pn:	Rennellese	<i>hetuʔu</i>	'star, constellation'
Pn:	Tongan	<i>fetuʔu</i>	'star; daisy'
Pn:	Hawaiian	<i>hōkū</i>	'star'
Pn:	Tikopia	<i>fetū</i>	'star, constellation'
Pn:	Anutan	<i>petū</i>	'star'

Venus (morning star, evening star)

The planets 'wander' in their movements and are of little use as guiding stars. The only one to feature regularly in word lists is Venus.

PMP **mantalaq* 'the morning (evening) star: Venus' (ACD)

PMP **(t)ala(q)* 'star' (Dempwolff 1938)

POc **madala* 'the morning star' (Blust 1972)

Adm:	Lou	<i>ko/mtal</i>	'morning star/evening star: Venus'
Adm:	Titan	<i>āpa/tal</i>	'morning star which appears about 5 a.m.'
Adm:	Loniu	<i>kopo/matan</i>	'morning star'
NNG:	Labu	<i>metana</i>	'morning star'
SES:	'Are'are	<i>matarā ni tani</i>	'morning star' (<i>tani</i> 'daylight')
SES:	Sa'a	<i>madala</i>	'morning star'
SES:	Arosi	<i>madara</i>	'morning star'
Mic:	Mokilese	<i>mahlahl</i>	'morning star'

As in English, Venus often appears to have separate identities as Morning and Evening Star. The following illustrate:

as Morning Star:

(i) compounds from 'star' + 'day'

PPn **fetuqu qaho* 'Morning Star'

Pn:	Marquesan	<i>hetu ao</i>	'star of dawn' (Makemson 1941:207)
Pn:	Tongan	<i>fetuʔu ʔaho</i>	'morning star'
Pn:	Samoan	<i>fetū ao</i>	'Morning Star'
Pn:	Tikopia	<i>fetū ao</i>	'Morning Star'
Pn:	Anutan	<i>petū ao</i>	'Morning Star: Venus'
Pn:	Hawaiian	<i>hōkū-ao</i>	'Venus when seen in the morning'
Mic:	Ponapean	<i>usuhn rahn</i>	'Morning Star' (<i>rahn</i> 'day')
Mic:	Kiribatese	<i>itoi ni ʔaina</i>	'Morning Star' (<i>ʔaina</i> 'day, daylight')

(ii) other compounds

NNG:	Gedaged	<i>boi tinan</i>	'Morning Star' (<i>boi</i> 'star', <i>tinan</i> 'mother' or 'big') ¹³
NNG:	Manam	<i>goai zama</i>	'Morning Star' (<i>goai</i> 'star', <i>zama</i> 'tomorrow')
PT:	Motu	<i>hisiu bada</i>	'Morning Star' (<i>hisiu</i> 'star', <i>bada</i> 'large')

¹³ Poc **tina*, lit. 'mother', sometimes carries the interpretation 'big' in contrast to 'child/small' (see Matisoff 1992).

as Evening Star (various compounds):

MM:	Roviana	<i>govete pisi</i>	'Evening Star, Venus' (<i>govete</i> 'to flee, run away', <i>pisi</i> 'to sting or bite, as insects')
SES:	To'aba'ita	<i>bubufana</i>	'Evening Star' (<i>bubu</i> 'look at', <i>fana</i> 'eat; food' (Lichtenberk pers. comm.))
SES:	Lau	<i>būbūfana</i>	'Evening Star' (<i>bunbun</i> 'look at, gaze', <i>fana</i> 'to have a meal, food')
SES:	Arosi	<i>maŋai ŋau</i>	'Evening Star' (<i>maŋa</i> 'eat', <i>ŋau</i> 'eat food')
Pn:	Tikopia	<i>fetū ramaŋa</i>	Alternative name for evening star when standing in west, in monsoon nights (lit. 'torchlight fishing star')
Pn:	Hawaiian	<i>hōkū-kau-ʔōpae</i>	'Evening Star' (lit. 'star for placing shrimp')

Big Bird (constellation including Sirius, Canopus, Procyon, Betelgeuse, Rigel)

One of the few constellations I have been able to identify and trace back to a POc origin is *manuk* 'bird' (*manu* in Mic. and Pn.), usually translated as 'Big Bird' or 'Giant Bird'. Most of the stars which fall within the Western constellation of Orion would also be included within the larger Manu constellation. Lewis (1978:11) writes of following "the guiding star Betelgeuse in Orion, the northern wingtip of the Polynesian constellation Giant Bird, whose head is Sirius and whose nether wingtip Canopus." In his dictionary Firth (1985) describes Rigel, on Orion's knee, as a central star of Manu. Although Lewis and Firth refer to Betelgeuse as indicating Manu's northern wingtip, Feinberg (188:104) marks it, from the Anutan point of view, with Procyon. Both are feasible. Feinberg (1988:110) also notes that on Nukumanu the Long Wing corresponds with Canopus but the Short Wing is marked by a star probably Monocerus.¹⁴

PMP **manuk* 'bird'

POC **manuk* 'bird, Bird constellation'

Adm:	Ninigo	<i>mān</i>	'(constellation incl.) Canopus, Sirius, Procea' (Lewis 1994:406)
Mic:	Puluwatese	<i>mān</i>	'a scattered group of stars, Canopus, Sirius, Procyon'
Mic:	Woleaian	<i>mal</i>	'Sirius-Procyon-Canopus star'
Pn:	Tikopia	<i>manu</i>	'Rigel' (part for whole) (Lewis 1978:33)
Pn:	Anutan	<i>manu</i>	'Bird constellation, consisting of Sirius (Manu's body), Canopus (east wing), Procyon (north wing) and a few stars in between' (Feinberg 1988:100)

We also have various references to particular stars as Manu's head, Manu's body, etc.

¹⁴ Gladwin (1970:148) writes that "on Puluwat the cardinal direction is east, under the rising of Altair, the 'Big Bird'". This is something of a puzzle because, although both Altair and Manu rise just north of east, they rise many hours apart. Altair is definitely not a part of the Manu constellation. It would seem that here we have an instance of a prominent star or star group being equated with a cardinal reference point.

Adm:	Ninigo	<i>mānifono</i>	'Sirius' (<i>fono</i> 'head') (Lewis 1994:406)
Adm:	Ninigo	<i>mānitola</i>	'Procyon' (Lewis 1994:406)
Adm:	Ninigo	<i>mānihaiup</i>	'Canopus' (Lewis 1994:406)
Mic:	Kiribatese	<i>baba-ni-man</i>	'Sirius' (<i>baba</i> 'chest')
Mic:	Puluwatese	<i>yinekin-mān</i>	'Sirius' (<i>yinek</i> 'body, trunk')
Pn:	Anutan	<i>te tino a manu</i>	'Sirius' (<i>tino</i> 'body') (Feinberg 1988:100)
Pn:	Anutan	<i>te kaokao o manu</i>	'Manu's armpit: a group of four small stars near Sirius (Manu); said to pass almost directly over Tikopia when approaching from Anuta' (Feinberg 1988:101)
Pn:	Tikopia	<i>te opiŋa o manu</i>	'Manu's armpit' (Feinberg 1988:101). A Tikopian name but commonly used on Anuta.

Others have dropped direct reference to Manu but retain the bird metaphor.

Pn:	Anutan	<i>te kapakau pakatokerau</i>	'Procyon, the 'north wing' of Manu constellation' (<i>kapakau</i> 'wing', <i>tokerau</i> 'north' (Feinberg 1988:101)
Pn:	Tikopia	<i>kapakau fakatokerau</i>	'Betelgeuse'
Pn:	Anutan	<i>te kapakau (paka)toŋa</i>	'Canopus, Manu's east wing' (<i>kapakau</i> 'wing', <i>toŋa</i> 'south/east' (Feinberg 1988:101)
Pn:	Tikopia	<i>kapakau fakatoŋa</i>	'prob. Canopus'
Pn:	Pileni	<i>trekapekau ki ndeni</i>	'Canopus' (Lewis 1994:408). (Ndeni is an island south-west of Pileni.)
Pn:	Pileni	<i>trekapekau ki taumako</i>	'Betelgeuse' (Lewis 1994:408). (Taumako is an island east north-east of Pileni.)

Stars are frequently named because of their local or seasonal significance.

Mic:	Kiribatese	<i>kāma-n-nuka</i>	'Betelgeuse in Orion'. (<i>Kāma</i> is the name of a mythical being, <i>nuka</i> 'middle'.) (Grimble 1931:241)
Mic:	Kiribatese	<i>te taubuki</i>	'Rigel' (lit. 'ridge of house roof')
Pn:	Maori	<i>takurua</i>	'Sirius' (also 'winter') (Åkerblom 1968:19)
Pn:	Hawaiian	<i>hōkū-hoʻokele-waʻa</i>	'Sirius' (lit. 'canoe-guiding star')

Pleiades

The Pleiades, or Seven Sisters, are a group of stars of moderate brightness which, because of their number and closeness to each other, form a small bright patch in the sky. Until recent times they served as significant calendar stars over much of the Pacific, their reappearance each year marking the beginning of the annual seasonal cycle. Åkerblom (1968:97) reports that the Polynesian year begins in Tahiti when the Pleiades rise on the eastern horizon in the evening (late November). But in Pukapuka, Mangareva, Marquesas and parts of New Zealand the seasonal cycle begins when the Pleiades appear on the eastern

horizon shortly before sunrise (about the end of May). Teuira Henry in 1928 described the Tahitian year as consisting of two seasons, *matarí-i-nia* 'Pleiades above', the forerunners of the season of plenty, and *matarí-i-raro*, 'Pleiades below', the season of scarcity (quoted in Makemson 1941:92). Makemson (1941:76) believes that the Polynesians carried the Pleiades year with them into the Pacific from the ancient homeland of Asia. Kiribati also recognises two seasons, one marked by the appearance of the Pleiades, the other by Antares. (Grimble, R. 1972: 223). There is somewhat tentative evidence for a POc reconstruction, for which I can locate no cognates east of the Solomons. The PPn reconstruction is more soundly based.

POc **bulu* 'Pleiades'

MM:	Nakanai	<i>e-vulu</i>	'Pleiades' (v for exp. b)
MM:	Roviana	<i>bibolo</i>	'Pleiades'
SES:	Kwaio	<i>bulu-bulu</i>	'star; firefly'
SES:	Lau	<i>(bu)bulu</i>	'star'
SES:	'Are'are	<i>puru-puru</i>	'star, firefly'
SES:	Arosi	<i>buru</i>	'Pleiades'

In Polynesia and Micronesia, a different term, translatable literally as 'small face' or 'small eyes', is widespread.

PPn **mataliki* 'Pleiades'

Pn:	Niuean	<i>mataliki</i>	'Pleiades'
Pn:	Pukapukan	<i>mataliki</i>	'Pleiades'
Pn:	Tahitian	<i>matarí?i</i>	'Pleiades'
Pn:	Maori	<i>matariki</i>	'Pleiades, the first appearance of which before sunrise indicated the beginning of the Maori year (about the middle of June)'
Pn:	Hawaiian	<i>makali?i</i>	'Pleiades; month name; the six summer months collectively'
Pn:	Anutan	<i>matariki</i>	'Pleiades'
Pn:	Tikopia	<i>matariki</i>	'Pleiades (sign of advent of trade wind season when appears on eastern horizon before dawn, also sign for turmeric extraction)'

A number of similar terms in Micronesian languages (Kiribatese *matiriki*, Puluwatese *mwárikér*, Woleaian *mwegariger*, Carolinian *mwáárigghár*) lack appropriate sound correspondences, and are treated as borrowings.

In a number of languages of the north coast of New Guinea (Gedaged *bazas*, Biliau *barahas*, Takia *baras*) the stars are thought of as young unmarried women, associated with health and fertility rituals. When the constellation reappears in mid-June, it is time to prepare the fields for planting yams.

A second Maori term for the constellation is *ao kai* 'season of food' (Makemson 1941: 200).

Southern Cross and pointers

Although the Southern Cross is typically associated with the southern hemisphere, it is visible in the lower latitudes of the northern hemisphere, and is a significant navigational constellation for Micronesia. A PEOc reconstruction is proposed below. In several of the languages in the Solomons and Micronesia, the same term denotes both the constellation and a triggerfish. Presumably the constellation is seen as triggerfish-shaped. The Samoan term, *sumu*, although not cognate, is also the term for a triggerfish. The Hawaiian term, *newe*, may be a borrowing from the upright position Carolinian form (see below).

PEOc **bubu* 'Southern Cross'

SES: Sa'a	<i>hoi pupu</i>	'Southern Cross'
SES: Arosi	<i>hua i bubu</i>	'Southern Cross'
Mic: Mokilese	<i>loh/pwu</i>	'Southern Cross'
Mic: Woleaian	<i>bbū</i>	'Cross (star)'
Mic: Marshallese	<i>būbwin epōn</i>	'Southern Cross'
Mic: Puluwatese	<i>pwupw</i>	'Southern Cross'
Mic: Carolinian	<i>bwūbw</i>	'Southern Cross'
Mic: Carolinian	<i>wenewenūbw</i>	'Southern Cross in upright position'

Other terms are descriptive, with the net metaphor and the cross shape or crucifix recurring.

SES: Sa'a	<i>?ape</i>	'Southern Cross' (lit. 'large square fishing net fixed on four upright poles')
Fij: E. Fijian	<i>kalokalo-ni-ðeva</i>	'Southern Cross' (<i>kalokalo</i> 'star', <i>ðeva</i> 'the south or south-east wind')
Pn: Anutan	<i>te kupēja</i>	'The Net: Southern Cross' (Feinberg 1988: 191)
Pn: Tikopia	<i>te kau kupēja</i>	'pole-net handle' (<i>kau</i> 'handle' probably refers to the Pointers rather than the Cross, which is the net.)
Pn: Pileni	<i>kau vakorna</i>	'Southern Cross' (Lewis 1994:87)
Pn: Kapingamarangi	<i>tina ti raji</i>	'Southern Cross' (lit. 'sky mother')
Pn: Tikopia	<i>te uru a tanjata</i>	'Southern Cross' (lit. 'man's head')
Pn: Tikopia	<i>rakau tapu</i>	'Southern Cross' (lit. 'sacred timber') (Lewis 1994:407)
Pn: Hawaiian	<i>hōkū-keʻa</i>	'Southern Cross' (<i>keʻa</i> 'cross, crucifix')

The Pointers

The Pointers, Alpha and Beta Centauri, are widely referred to by compounds translatable as the 'two men'. The S.E. Solomonian form is derived from POc **mwaqane* 'man, male', while the Polynesian examples are reflexes of POc **tamwata* 'living person'.

SES: Sa'a	<i>ro mwane</i>	'Pointers (to Southern Cross)' (lit. 'two men')
Pn: Samoan	<i>lua tanjata</i>	'Pointers – Alpha and Beta Centauri' (Åkerblom 1968:27)
Pn: Tikopia	<i>rua tanjata</i>	'Southern Cross' (Lewis 1994:407)

Pn:	Tokelauan	<i>na tanata</i>	'these two stars are guides for voyages from Tokelau to Samoa' (MacGregor 1937:89)
Pn:	Hawaiian	<i>lua-ae-tanata</i>	'star used in navigating from Tonga north to Niuatoputapu' (Parsonson 1962:42)
Pn:	Anutan	<i>rua tanata</i>	Lit. 'double man': constellation consisting of two bright stars near the Southern Cross. Centaurus, also known as <i>te kau o te kupega</i> 'handle of fishing net' (Feinberg 1988:196)

Orion's Belt

It is hardly surprising that names for the group of three bright stars in a row should typically focus on the number. Terms in the S.E. Solomons, Polynesia and Micronesia all contain reflexes of POc **tolu* 'three'. In 'Are'are, Sa'a and Arosi in the S.E. Solomons they are named by the term for a three-man canoe *ta'e-oru*. In Tonga they are *alo-tolu* and in Tikopia and Anuta *ara-toru* 'path of three', a reference to an origin legend in which the three brothers of the demigod Motikitiki died and ascended to the sky when their outrigger was severed from their canoe following an argument (Feinberg 1988:11). In Maori they are referred to as *tau-toru* 'three men' (Åkerblom 1968:82), while in Tokelau according to Macgregor (1937:90) the group is called simply *tolu* 'three'. Pukapukans call them *toluŋa maui* 'Maui's three', Maui being a legendary Polynesian hero (Lewis 1994:408). The Carolinian name *elūwel* is the term for three plus the classifier for general objects. The North New Guinea language of Gedaged is an exception. Their term is *nituz*, which is also the term for a fish holder – the hooked string or branch used to string up fish.

Taurus, (the Triangle, the Triangle, the Tongs), including Aldebaran

No cognates are evident, but there is an apparent loan-translation, (or simply independent recognition of a common household utensil shape) in that Sa'a, Lau and two Polynesian languages all name the constellation with the local word for tongs.

SES:	Sa'a	<i>ireki</i>	'the Southern Triangle' (lit. 'tongs')
SES:	Lau	<i>sākai</i>	'bamboo tongs: name of constellation of six stars'
Pn:	Tikopia	<i>te ūkopi</i>	'the Tongs (Taurus's forehead), particularly Aldebaran' (Feinberg 1988:101). (Firth has <i>ūkofi</i>)
Pn:	Anutan	<i>te aŋa-aŋa</i>	'the Tongs: a constellation consisting of seven stars from Taurus arranged in a V pattern' (Feinberg 1988:189)

In Fiji the constellation is known as *laḍa*, literally 'a sail'.

There is a possible PEOc reconstruction for Aldebaran, the single brightest star of the group, although the Kapingamarangi term may well be a borrowing from Micronesia.

PEOc **ūnu* 'Aldebaran'

Mic:	Puluwatese	<i>wūn</i>	'Aldebaran'
Mic:	Woleaian	<i>ūlu</i>	'Aldebaran'. Also the name for a kind of dorfín (dorsal fin also triangular [MO])
Pn:	Kapingamarangi	<i>ūnu te</i>	'star name' (Pukui and Elbert 1973)

Other names located for Aldebaran include:

Mic:	Kiribatese	<i>te boto-n-aiai</i>	'Aldebaran (in Taurus)' (lit. 'ribs (<i>aiai</i>) of canoe', because it stands in the V-shaped portion of Taurus) (Grimble, A. 1931:241)
Pn:	Tahitian	<i>ana muri</i>	'Aldebaran' (Lewis 1994:403)
Pn:	Maori	<i>wero-i-te-kokota</i>	'Aldebaran' (Åkerblom 1968:19, from Beattie) (Tattoo design??)

Polaris

Polaris marks the centre of the North Celestial Pole. From the viewpoint of a stationary observer it never moves. It is also a good indicator of how far north of the Equator you happen to be. In Western terminology, if Polaris is 15° above the horizon, then your location will be at 15°N latitude. It disappears below the horizon as you move south across the Equator. It is valued by Micronesian sailors because it is always there unless obscured by cloud, and, being close to the horizon, it provides a good bearing (Gladwin 1970:148). The following compounds have been collected. Again we find loan translations rather than cognates.

Mic:	Puluwatese	<i>fúú há mwakét</i>	'Polaris' (lit. 'star not moving')
Mic:	Woleaian	<i>weleweleti iyefani</i>	'Polaris' (<i>welewe</i> 'straight, steady, still', <i>iyefani</i> 'north')
Pn:	Tahitian	<i>ana-nia</i>	'Polaris' (Lewis 1994:403)
Pn:	Hawaiian	<i>hōkū-paʻa</i>	'Polaris or North Star' (<i>paʻa</i> 'firm, steadfast')

Altair

The only cognate set located is from Micronesia.

Mic:	Puluwatese	<i>mááy láp</i>	'Altair; a month, about March: from <i>mááy</i> 'breadfruit', <i>lap</i> 'old'. (Breadfruit season here is May–Dec., so appearance of Altair marks the season of old breadfruit. It also marks the season of north-east winds and much sailing. <i>Mááylápánefán</i> is the name given to the season.)
Mic:	Woleaian	<i>maailapa</i>	'Altair, the most prominent star in Carolinian navigation'
Mic:	Satawalese	<i>mailap</i>	'Altair' (McCoy 1976)

The Maori name for Altair is *poutu-te-rangi* 'pillar of heaven', a reference to a creation myth in which the sky is supported on pillars (Makemson 1941:64).

Antares

Antares, in the western constellation of Scorpio, ranks with the Pleiades as the most important of the calendar stars throughout the whole Pacific area (Makemson 1941:98). I have located cognate sets from both Micronesia and Polynesia, terms from the latter referring at times to Venus.

PMic **sumwuri* 'Antares'

Mic: Trukese	<i>tumwur</i>	'Antares'
Mic: Carolinian	<i>tumur</i>	'Antares'
Mic: Puluwatese	<i>tumúr</i>	'Antares'
Mic: Woleaian	<i>tumwiri</i>	'Antares'
Mic: Kiribatese	<i>rimwima(a)ta</i>	'Antares'

PEllicean **refua* 'a star name, Antares?' (Pollex)

Pn: Marquesan	<i>ehua</i>	'Antares' (Makemson 1941:207)
Pn: Hawaiian	<i>we-lehu</i>	'Antares' (Makemson 1941:98)
Pn: Maori	<i>rerehu</i> or <i>rehua</i>	'Antares' (Makemson 1941:98)
Pn: Tuamotuan	<i>rehua</i>	'a star, Antares?'
Pn: Tahitian	<i>rehu</i>	'a month name, between December and January'

PPn **mele(mele)* 'Venus or Antares'

Pn: Pukapukan	<i>melemele</i>	'Antares' (Lewis 1994:406)
Pn: Kapingamarangi	<i>meremere</i>	'Antares'
Pn: Maori	<i>meremere</i>	'Venus as evening star'
Pn: Hawaiian	<i>melemele</i>	'name of a star (Venus?)'

The Tahitians called it *ana mua*. For them it represented the front pillar, the parent pillar of the sky (Makemson 1941:36).

Magellanic clouds

I have located terms only within Polynesia and Fiji. The reference to *rua* 'two' in Pileni and Manihiki is presumably to the Greater and Lesser Magellanic Clouds. They appear as two distinct nebulae.

PPn **maqafu* 'Magellanic Clouds'

Pn: Tongan	<i>maʔafu</i>	'Magellanic Clouds, a primary reference point for Tongan orientation', <i>maʔafu lele</i> 'flying fire' and <i>maʔafu toka</i> 'stationary fire'
Pn: Pileni	<i>lua mafu</i>	'Magellanic Clouds' (Lewis 1994:406)
Pn: Manihiki	<i>rua mafu</i>	'Magellanic Clouds' (Lewis 1994:407)

In Samoa, and also Anuta, they could simply be referred to as 'flying cloud' and 'stationary cloud'.

Pn: Samoan	<i>ao lele, ao toa</i>
Pn: Anutan	<i>ao rere, ao toka</i>

In E. Fijian they were *matādravu ni sautū*, literally 'hearth of peace and plenty'.

Milky Way

Makemson (1941:183) refers to the “Milky Way, whose change of position in the sky during the night provided the universal method of determining the passage of time”. I have a cognate set from Polynesia.

PPn **kaniwa* ‘the Milky Way’

Pn: Tongan	<i>kaniva</i>	‘the Milky Way’
Pn: Samoan	? <i>aniva</i>	‘The Milky Way’
Pn: Sikaiana	<i>kaniva</i>	‘rainbow’
Pn: Tikopia	<i>te kau tu keniva</i>	‘the Milky Way’ (lit. ‘handle of <i>keniva</i> ’)
Pn: Tokelauan	<i>kaniva</i>	‘the Milky Way’
Pn: W. Futunan	<i>kaniva</i>	‘the Milky Way’

In Gedaged (NNG) the Milky Way is *wat-daden* (*wat* ‘driftwood, flotsam’, *daden* ‘trade, barter’). The association is not explained.

In Carolinian the galaxy is *mesal fúú*, literally ‘the face of stars’.

Makemson (1941:183-186) lists a range of picturesque terms used by the Polynesians for the Milky Way which include the Mangaian *moko-roa-i-ata*, literally ‘long lizard of morning’, the Hawaiian *kuamoʻo* ‘backbone (of lizard)’, the Tuamotuan *vaero-o-te-moko* ‘tail of the lizard’ and a group of Maori terms, *ika-nui* ‘great fish’, *ika-roa* ‘long fish’ and *maŋo-roa* ‘long shark’. Still another Maori term for the Milky Way is *pae-roa-o-whanui*, literally ‘the long threshold of wide space’.

Star path

Firth (1954:91) writes:

The major navigational guide [in Tikopia] is the Star-path, the ‘Carrier’ (Kavenga). This is a succession of stars towards which the bow of the canoe is pointed. Each is used as a guide when it is low in the heaven; as it rises up overhead it is discarded and the course is reset by the next one in the series. One after another these stars rise till dawn, and at some times of the year a few still remain to rise when dawn breaks.

Lewis (1978:18) records identical advice given to him by a Tongan navigator in 1965, who refers to “*kaveiŋa*, the star path”.

PPn **kaveiŋa* ‘that which is steered for (usually a star)’. (From PPn **kawe* ‘to carry’ + *-i* (verbal suffix from POC transitive marker **i*) + *-ŋa* (nominaliser))

Pn: Tongan	<i>kaveiŋa</i>	‘star or other object for which one steers’
Pn: Pukapukan	<i>kaveiŋa</i>	‘a group of stars on the same declination, thought of as a constellation’
Pn: Tikopia	<i>kaveŋa</i>	‘carrier; esp. navigational aid by sequence of stars, star path’
Pn: Tahitian	<i>aveiŋa</i>	‘star path’
Pn: Tuamotuan	<i>kave(e)ŋa</i>	‘guiding star’
Pn: Rarotongan	<i>kaveiŋa</i>	‘that which is steered for’
Pn: Anutan	<i>kāveŋa</i>	‘the major guiding stars or constellations’

Feinberg (1988:100) adds a qualifier to the last-mentioned form. He writes: “The name *kāveŋa* ‘carrier’ refers to the particular star or constellation being followed at a given moment. A star path or sequence of stars that is followed from one island to the next,

including those stars not yet risen or already set, is a *kau panōa porau*. (lit. ‘company or group for voyaging’).” Feinberg describes this as the Anutans’ single most important navigational tool.

For Tikopia, Firth offers a purely literal term of *ara fetū* ‘star path’, and compares it with *ara a vaka* ‘canoe path’, the latter presumably referring to the actual sea route. The Maori term for star path is *ara whetū* (Grimble, R. 1972:296).

Although the Micronesians followed successive rising or falling stars in the same way, we lack a Micronesian term for the concept.

Beatrice Blackwood (1935:381-382) documents a voyage in the N.W. Solomons from Buka to Nissan made by Hanahan speakers which agrees in every respect with Firth’s description of navigating by using a star path. She gives a sequence of ten stars, but no term for the system.

Star rise and star set

Stars provide the most accurate bearings when they are low in the sky. Thus navigators describing star paths refer not to star X but to ‘rising X’ or ‘setting X’.

Rising

We have a POc reconstruction whose Micronesian reflexes can be added to star names. Thus, we find terms meaning Scorpio rising, Altair rising, etc.

POc **sake* ‘to rise, go up; upwards’

Adm:	Mussau	(<i>sae</i>) <i>sae(na)</i>	‘upwards’
PT:	Motu	<i>dae</i>	‘to ascend’
MM:	Bali-Vitu	<i>ḍaye</i>	‘(sun) rise’
MM:	Meramera	<i>saʔe</i>	‘climb’
SES:	Sa’a	<i>tae</i>	‘up, inland’
SES:	Arosi	<i>taʔe</i>	‘to go up, ascend’
SES:	Lau	<i>tae</i>	‘to rise, ascend, get up, climb’
SES:	Longgu	<i>taʔe</i>	‘to ascend, go up’
Mic:	Marshallese	<i>tak</i>	‘eastward, upward’
Mic:	Ponapean	<i>dak</i>	‘to rise, of the sun and moon’
Mic:	Mokilese	<i>dak</i>	‘to rise (of sun); to shine’
Mic:	Kosraen	<i>tak</i>	‘to rise’
Mic:	Kiribatese	<i>rake</i>	‘up, upwards, eastwards’
Mic:	Woleaian	<i>tag (tage)</i>	‘upward, eastward, up’ (<i>getage-fius</i> (noun), ‘rising stars’ e.g. <i>tagali-bbu</i> ‘Crux rising’, <i>tagali-matariuwa</i> ‘Scorpio rising’; also <i>tagali-yalo</i> ‘sunrise’)

Mic:	Puluwatese	<i>táán</i>	'to rise in the east, of stars' e.g. <i>táánupw</i> 'rising Southern Cross', <i>tááni méél</i> 'rising Vega'. Lewis (1994:404) refers to (uncorrected spelling) <i>daane elüel</i> 'rising Orion's Belt, 90°', <i>daane mailöb</i> 'rising Altair, 83°', and <i>daan uun</i> 'rising Aldebaran, 75°'.
Mic:	Carolinian	<i>táán</i>	'rising (esp. heavenly bodies)'
Fij:	E. Fijian	<i>ðake</i>	'east; upwards'
Pn:	Tongan	<i>hake</i>	'to go up, esp. from the sea to the land'
Pn:	Tongan	<i>ha-hake</i>	'east'

The term can be traced back to an earlier PMP **sa(ŋ)kay* 'catch a ride, ride on something' (ACD). This sense is preserved in many contemporary languages in addition to the 'rise, go up' sense. Reflexes can also carry the directional 'east'.

Setting

The POc term usually paired with **sake* 'to go up, upwards' is **sipo* 'go down, downwards'. Reflexes sometimes refer as well to the directional 'west'.

POc **sipo* 'go down, downwards'

Adm:	Lou	<i>si</i>	'down; descend'
PT:	Motu	<i>dihō</i>	'to go down, to descend'
MM:	Bali-Vitu	<i>(va)ðiyo(ni)</i>	'downwards'
MM:	Nakanai	<i>sivo</i>	'go down'
MM:	Tomoip	<i>tio</i>	'(sun) set'
SES:	Lau	<i>sifo</i>	'go down'
SES:	'Are'are	<i>siho</i>	'to set, of sun'
Mic:	Woleaian	<i>tubu</i>	'to set, of heavenly bodies' (e.g. <i>tubuli-weleogeo</i> 'Ursa Major setting', <i>tubuli-yalo</i> 'setting sun')
Mic:	Carolinian	<i>tubwu</i>	'to sink, go down, set (of sun, moon, stars)'; <i>tubwul</i> (n.) 'setting, setting position of stars, etc.'
Mic:	Puluwatese	<i>tupwu</i>	'to set, as the sun'
Mic:	Trukese	<i>tupwu</i>	'setting (western) position of a heavenly body'
Fij:	Wayan	<i>ðivo</i>	'sudden powerful gust; squall'
Fij:	E. Fijian	<i>ðivðivo</i>	'wind sweeping down from hills'
Pn:	Samoan	<i>ifo</i>	'downwards'
Pn:	Tongan	<i>hifo</i>	'downwards'
Pn:	Tikopia	<i>ifo</i>	'down, come down, descend'
Pn:	Maori	<i>iho</i>	'downwards'
Pn:	Hawaiian	<i>iho</i>	'downwards'

Jeff Marck (pers. comm.) has pointed out that in Micronesia, reflexes of POc **solo*, referring to mountain peak, tip of mast or similar high spot (see cognate set over page), are combined with reflexes of **sake* to describe the first sight of objects that break the horizon, or **sipo* to refer to the last sight of objects that disappear below it. When reflexes of **solo*

are linked with star names, they have come to carry the meaning of an object disappearing or setting.

Mic:	Puluwatese	<i>tolol</i>	(noun), 'setting, of stars' and <i>tololó</i> 'verb, to disappear, set, as a star'. e.g. <i>tolonupw</i> 'Southern Cross in setting position' (Elbert 1972). Lewis (1978:166) offers (his spelling) <i>doloni mariger</i> 'Pleiades setting' while (Finney 1976:24) lists <i>dolon uun</i> 'Aldebaran setting'.
Mic:	Woleaian	<i>tolo</i>	'to disappear, submerge, go out of sight, vanish'
Mic:	Marshallese	<i>tal</i>	'sink, submerge'
Mic:	Satawalese	<i>tol</i>	'disappear from sight'
Mic:	Carolinian	<i>tol, tololó</i>	'to disappear from sight, esp. over the horizon, or behind a cloud'

Zenith star

A zenith star is a star whose path is seen as lying directly overhead a particular island. It is thus a rough indicator of the latitude of that island. (It tells nothing of longitude, so is useful mainly in north-south voyages, such as from Hawaii to Tahiti.) For instance, Arcturus is the zenith star for Hawaii; Sirius marks Tahiti, Fiji and Vava'u in Tonga; while Rigel is the zenith star for Tikopia, Anuta and Vanikoro.

Lewis (1978:33) writes that "the determination by zenith stars of what amounts, in our terms, to latitude, has long been postulated as a Polynesian navigational method, but on largely circumstantial evidence". He records his subsequent emotion when a Tikopian navigator, Ramfe, referred to 'stars on top' as opposed to guiding stars. Ramfe knew that there were different 'on top' stars for other islands, and that his grandfather had known them but that he himself had forgotten them. Lewis (1978:33) writes that this information was later repeated independently by other Tikopian navigators. The only other direct reference Lewis (1978:77) makes comes from Tonga, where a member of the hereditary navigator clan, the Tuitas, told Lewis that a *fanakena* star, in secret Tuita usage, is 'a star that points down to an island, its overhead star'.

Although references to zenith stars are frequent in the literature, I cannot reconstruct any term for the concept. There is less need for zenith stars in the northern hemisphere, because Polaris is always a convenient indicator of latitude. The Micronesian navigators whose methods were described by Lewis, Gladwin and others, evidently made no use of zenith stars.¹⁵

Blust has reconstructed WMP **uRtuh* 'zenith; noon, mid-day' (ACD), i.e. with specific reference to the sun, but I have been unable to locate any Oceanic cognates. The only

¹⁵ However, Tom Davis, Cook Islander and experienced western-style ocean yachtsman, has provided a plausible solution to a question which has long puzzled Lewis and others concerned to understand the skills of the early Pacific navigators. This relates to a report made in 1866 by a Spanish Captain Sanchez after interviewing an Elato (Carolines) navigator, which refers to the observation of star zenith by filling a cane with water, and similar references to a Polynesian sextant or sacred calabash (Lewis 1978:78). Davis proposes that an instrument of this kind, i.e. a coconut with holes drilled appropriately, can identify when the angle of a particular star above the horizon is of a predetermined size, not the 90° of a zenith star, but rather one of about 45°, this being known in advance as the declination of this star when over a particular destination. In other words, it signifies that one is on the same latitude as one's destination. Davis (1992:70-73) gives a fuller description of the instrument and its use in his autobiography.

cognate set with associated meaning that I can find has terms restricted to the S.E. Solomons, where it means 'mountain', and Micronesia, where its meaning has been extended to include 'peak, pinnacle, top of mast', and in Carolinian and Satawal, to the height of the sun.

POc **solo* 'mountain, highlands interior'

MM:	Mono-Alu	<i>olo</i>	'mountain'
SES:	Lau	<i>tolo</i>	'mountain, hill country, interior of island'
Mic:	Puluwat	<i>tōl, tolon</i>	'top section of mast'
Mic:	Ponapean	<i>dohl</i>	'small mountain'
Mic:	Carolinian	<i>tōl</i>	'mountain peak; the time or height of the sun; the distance from one place to another' (Marck 1994)
Mic:	Marshallese	<i>tol</i>	'mountain'
Mic:	Kosraen	<i>olo</i>	'top, tip, apex'
Mic:	Mortlockese	<i>tōl</i>	'top of mast, peak, pinnacle' (Marck 1994)
Mic:	Satawalese	<i>tōl</i>	'height of sun' (<i>tolo</i> - 'mountain' (Marck 1994))

Kiribati has a term *taubuki ni karawa* for 'zenith', literally 'the ridgepole of heaven'. Note that *taubuki* is also the name for the zenith star Rigel.

Other terms appear to be unrelated:

Pn:	Samoa	<i>tumu-tumu</i>	'top; peak, height, zenith'
Pn:	Maori	<i>puāpa</i>	'zenith'. Also refers to Rigel, ¹⁶ in Orion's Belt.
Pn:	Anutan	<i>puŋapenua</i>	'summit; the highest point of an island'

The Hawaiians have a term for zenith, *hoʻokuʻi*, which is literally 'point of juncture'. Elbert and Pukui's dictionary records an expression *mai ka hoʻokuʻi a ka hālāwai* 'from zenith to horizon', *halawal* meaning 'meeting' as well as 'horizon'. Both terms appear to relate to the concept of sky zones, a kind of grid reference of lines drawn across the sky.

Star compass

The fact that stars always rise and set at the same point on the horizon has in some places led to the use of star names as cardinal compass points. A surviving example of a sidereal compass comes from the Carolines, where Goodenough in 1953 recorded a compass with thirty two named star positions (Lewis 1994:102). The terms cannot be equated precisely with the cardinal points of a European compass; they are not placed at regular intervals but are bunched together at their eastern and western margins. The primary compass point and basis of the Carolinian navigational system is the position where Altair rises in the east, in our terms at 8°30' N. No term has been located for the compass as such, but many of the stars identified in this paper – Altair, Aldebaran, Pleiades, Orion's Belt, and Antares – are represented on the Carolinian compass by both their rising and setting positions. Polaris represents due north. No fewer than five southerly directions are indicated by the various positions of the Southern Cross, depending upon whether its axis is upright, lying at either diagonal or horizontally on either side (Lewis 1994:103-106).

¹⁶ Rigel is not an overhead or zenith star for New Zealand, so one must assume that its dual meaning has been brought from a place where it is – i.e. about 8°S latitude, far north of New Zealand.

2.2 Winds

Navigators, steering primarily by sun and star, also need to take into account variable factors such as winds and currents for which a steersman must compensate if he is to maintain his course.

The Pacific wind systems and associated terminology have been described in detail in Ross (1995). He has reconstructed the following POc terms for seasonal winds and wind directions:

POc **raki* 'S.E. tradewinds; dry season associated with S.E. trades'

POc **apaRat* 'wet season when north-westerlies blow and sea is rough' (Dempwolff 1938.) (Fij. and Pn. reflexes refer to storms and cyclones associated with the wet season). (From PMP **habáRat* 'S.W. monsoon season, wet season')

POc **timu(R)* 'wind bringing light rain' (PMP **tímuR* 'south or east wind' (Dempwolff 1938))

POc **toŋa*. Meaning uncertain except for PPn reflex 'S.E. trades' (Pollex)

POc **tokelau(r)* 'N.W. storm wind' (?), PPn **tokelau* 'northerly quarter and wind from that quarter; N.W. storm winds' (Pollex)

POc **karak(a)* '(strong?) S.E. trades'

POc **muri/miri* 'S.E. trade wind'

POc **marau* 'S.E. trade wind'

POc **aqura* 'wind, particularly S.E. trade'

Wind compass

Terms for seasonal winds also come to be applied to that section of the compass from which the winds blow. Frequent reference is made in the literature to 'wind compasses'. Parsonson (1962:41) writes that "like the Arabs, the Polynesians divided the horizon into a greater or lesser number of points, the Tahitians into 16 parts, the Cook Islanders 32, to each of which corresponded a wind". Lewis (1984:112ff.) has recorded wind compasses in both the Southern Cooks and Pukapuka, the Tokelaus and Tahiti, and refers to rather more nebulous reports from the Carolines. He also reports a six-point wind compass from the Lau group of Fiji. Feinberg (1988:92) writes that "Anutans have what might be described as a rudimentary wind compass in that they know the prevailing winds at various seasons and use the same term for the wind coming from a particular direction and the name of the geographical bearing itself. However, the number of points is not great." Feinberg in fact lists six – *tokerau* (N.W.), *ruatū* (N.E.), *toŋa* (E), *tuauru* (S.E.), *raki* (S.W.), and *pakatiu* (W). He reports that Firth gave a similar description for Tikopia wind points, although the latter are rotated roughly 40° clockwise from the Anutan ones. Lewis (1994:118-119, quoting from Chappell) mentions a rare Melanesian example, from the Vitiaz Strait between New Guinea and New Britain, where a five-point wind compass from Siassi has been recorded.

There is general agreement that winds can equate with cardinal directions only in a very loose sense. Both Lewis and Gladwin reiterate that directions for the navigator need not be precise in the cartographer's sense; they only must be good enough to enable him to get where he wants to go with some margin for error. Winds indicate approximate directions; star bearings are absolute.

2.3 The seascape

In the area of sea signs, my hunt for terms has been much less successful than with heavenly bodies. There are a number of terms – for the sea itself, and for current, drift, wave and reef – which are not restricted to navigation, and which in any event are well-attested. Accordingly, I simply list the reconstructions:

POc **ma-sawa* ‘open sea, space’

POc **laman* ‘deep blue sea beyond the reef’ (Blust 1984a)

POc **tasik* ‘sea water, salt water’

POc **lauR* ‘sea, seashore, seawards’ (from PMP **lau(d)* ‘sea’)

POc **qaRus* ‘current’ (from PMP **qaRus* ‘current, flow’ (ACD))

POc **maqañur* ‘floating, adrift’ (ACD) (from PAn **ma-qañud* ‘adrift’ (from PAn **qañud* ‘drift on a current, carried away by flowing water’) (ACD))

POc **napo(k)* ‘wave’ (from PAn **Nabek* ‘breakers, surf, waves’) (ACD)

POc **sakaRu* ‘reef’ (from PMP **sakaRu* ‘reef’) (ACD)

A small group of terms may be considered as particularly significant to navigation. These are discussed below.

Swell

Ocean swells are unbreaking waves which have their origin in regions of strong and persistent winds such as the tradewinds or the monsoons. They travel beyond the wind systems that generate them, and remain after the wind has died away (Lewis 1994:124). Although they vary with the seasons, and to some extent with local weather conditions, their behaviour tends to be long-term, and thus reasonably predictable for any particular journey. Typically, two, three or more swells will move across or through each other simultaneously, requiring a high degree of skill on the part of the navigator first to distinguish and then to compensate for when maintaining course. Gladwin (1970:170) describes Puluwat as having three main swells, Big Wave, North Wave and South Wave. Lewis writes that in the Santa Cruz Group, three swells are considered to be present all year round. They are *hoa-hua-loa*, the long swell from the south-east, *hoa-hua-dela-tai*, the sea swell from east north-east and *hoa-hua-dela-hu* from the north-west. Lewis (1994:128) suspects that these originate from the S.E. trades, the N.E. trades and the N.W. monsoon respectively, and considers that this is a fairly general pattern in this segment of the Pacific. “Further eastward, but still south of the equator, we might expect the effects of the monsoon to be lost, and, once clear of the big Melanesian islands, for the Southern Ocean swell to sweep unhindered up from the south. This indeed is the pattern in the Gilberts and Tonga, with their ‘great swells’ from the east and south.”

We have a POc reconstruction, **ñalu(n)*, although there is some doubt as to whether it referred just to swells or to ocean waves of all kinds. Any known sea route can be expected to have its own probable swell pattern, with individual swells likely to be given local names.

PMP **qalun* ‘long rolling wave, swell, billow’ (ACD)

POc **ñalu(n)* ‘(ocean) wave’ (Blust 1972)

PT: Tubetube *yalu* ‘backwash from wave breaking on the beach’

SES: Lau *ñaluñalua* ‘a rough confused sea’

Mic:	Marshallese	<i>gol</i>	'ocean swell, mounting wave which does not break, billow'
Mic:	Kiribatese	<i>nao</i>	'wave, swell'
Mic:	Kiribatese	<i>nao banaki</i>	'long low swell from south (the main swell)'
Mic:	Kiribatese	<i>nao uea</i>	'area of intersecting swells west of land'
Mic:	Kiribatese	<i>nao makoro</i>	'refracted swell from east of land'
Pn:	Tongan	<i>ηalu</i>	'wave (when rolling in), breaker or surf'
Pn:	Samoa	<i>ηalu</i>	'wave, breaker; to be rough'
Pn:	Tikopia	<i>ηaru</i>	'wave, swell (normally used collectively in singular form)'
Pn:	Rapanui	<i>ηaru</i>	'to swim over the waves'
Pn:	Maori	<i>ηaru</i>	'wave of the sea'
Pn:	Anutan	<i>ηaru</i>	'wave (generic); breaker' (Feinberg 1988:192)
Pn:	Tikopia	<i>ηaru</i>	'wave, swell'

Heyen (1962:67) lists a further two Kiribatese terms, *ao-mean* 'the sea swell from the north' and *ao-maiaki* 'the sea swell from the south'.

Feinberg (1988:114) lists terms from Tikopia – *ηaru fenua*, and Anuta – *ηaru penua*, which refer to swells which have been reflected back from a land mass, and thus serve as indicators that land is close.

It is possible that a second reconstruction, PPn **peau* refers more specifically to swells.

PPn **peau* 'wave of the open sea'

Pn:	Samoa	<i>peau</i>	'wave, billow'
Pn:	Tuvaluan	<i>peau</i>	'wave of sea'
Pn:	Tokelauan	<i>peau</i>	'billow, roller'
Pn:	W. Futunan	<i>peau</i>	'white caps; swell in ocean'
Pn:	Tikopia	<i>peau</i>	'foam, spindrift at sea'

Deep phosphorescence

This phenomenon is distinct from surface phosphorescence. It comprises streaks and flashes of light a metre or so below the surface, and is in constant motion.

Its flashes dart out from the directions in which islands lie, or else flicker to and fro in line with these bearings. It is best seen 'in the middle sea, 80 – 100 miles out', but it invariably indicates the direction of land. As you approach land, it becomes scanty and finally disappears by the time the island (if an atoll) is well in sight. (Lewis 1994:253)

It is particularly marked on dark rainy nights, when it becomes the main direction finder. Lewis has recorded it in Pileni in the Reef Islands, in Tonga, and also in Micronesia, although in each place by unrelated names. In Pileni the term is *lapa*, a reflex of POc **lapa(r,R)* 'lightning'. In Tonga it is *ulo ?a e tahi*, literally 'flame of the sea'. In Kiribatese it is called *te mata*, here in its sense of light or something used to give light. The only other reference to it is as a Marshallese term given by Lewis (1978:119) as *drojet*, which I cannot locate in the Marshallese dictionary although the second element *-jet* is from **tasik* 'sea water'. In any event, there is no evidence between the terms of either relatedness or borrowing.

Reference island

Lewis's books make frequent reference to *etak* islands, used as 'moving' reference points by Puluwat navigators. A voyage is conceived of as being divided into stages or segments with reference to a sequence of islands lying away to one side of the course. Each island is in turn conceptualised as moving while the canoe's position is held to be fixed relative to that of a given star with which each island is aligned. *Etak* refers both to the concept of dividing up the voyage in this way, and to the stages themselves.

An etak is a variable distance...[but] the etak island is generally so chosen as to make an etak segment somewhere around 20 miles. The first and last two etaks of a voyage are exceptions. These are the 'etak of sighting' and the 'etak of birds', and both are absolute distances of 10 miles. (Lewis 1978:147. See also Gladwin 1970:181-186.)

The only reference to *etak* as a concept is from the Carolines (*etak* in Puluwat and Satawal, *hatag* in Woleaian). However, Lewis believes that the navigator Tevake, from the Polynesian outlier Pileni, must have used a similar system. He writes:

His [Tevake's] ability to point out the direction of invisible islands whenever he wished is presumptive evidence that he was thinking in terms of some form of home-centre reference system.

and again (1994:171),

One cannot say whether or not Tevake's orientation concepts resemble the Carolinian one of etak. One can, however, be certain to this extent about the picture that his mind composed of the changing relationships of islands 50 and 100 miles from his course. This was of a similar order of accuracy and enabled him to point out the direction of invisible islands, in the same manner as the etak system.

I have not been able to trace the term elsewhere.

Sea marks

Lewis (1994:291) writes that:

The term 'sea marks' (*betia*) is a Gilbertese one, but the conception is not unique to that archipelago or to Micronesia. Carolinian navigators, for instance, learn sequences of what they call 'sea-life'. These, much more frequently than their Gilbertese counterparts, are transitory phenomena such as sightings of certain fish, and the like. Some, however, like a whirlpool on Uranie Bank, have real and permanent existence.

Lewis (1994:291) then includes a quote from Grimble:

There were certain traditional signs by which navigators judged their distance westward of the land. The safety limit to leeward (i.e. westward in the trade season) was called the Fish Wall of Kabaki. It consisted of a line of leaves and rubbish scattered over the sea from Makin to Samoa far to the westward of the land. This is probably quite true, the rubbish being carried by some current.

I cannot trace a source for the term *betia*, nor can I locate any comparable terms from other languages.

Expansion of target

Pacific navigators reduced their risk of missing a target island through various strategies designed to expand the target. As a general rule, low islands with trees are visible for a distance of about 10 miles. Bird sightings can at least double this range. Terns, noddies and boobies are all species that spend their days flying over off-shore fishing grounds. As night

approaches they will drop low over the water and make a beeline for their land roosts. The reverse occurs at dawn. Terns and noddies will range up to 20–25 miles offshore, while the range of boobies is 30–35 miles (Lewis 1978:30). Other indicators of nearby land include the presence of off-shore reefs, a change in the patterning of swells as one nears land caused by their refraction at a different angle, change in water colour, and particular effects in the clustering and colour of clouds that gather over land. Although these indicators are put to practical use in various parts of the Pacific, we have insufficient linguistic data to draw any conclusions about origins of these concepts.

3 Navigation in Western Oceanic and the Admiralties

3.1 Navigation in Western Oceanic

There is little information on navigation among the people of the Western Oceanic region. One might expect that any such skills would have been most developed in the offshore islands, particularly the smaller ones where trading was essential to a community's livelihood. One such region is the Milne Bay area off the tip of Papua, where the trading cycle known as the "kula ring" flourished until a few decades ago. We have some information on two of the communities involved, the Trobriand Islanders and the people of the Amphlett group. Malinowski (1922:225-226), writing on the navigation skills of the former, records that:

Taking the bearing by sight, and helped by the uniformity of winds, the natives have no need of even the most elementary knowledge of navigation. Barring accidents they never have to direct their course by the stars. Of these, they know certain outstanding constellations, sufficient to indicate for them the direction, should they need it. They have names for the Pleiades, for Orion, for the Southern Cross, and they also recognize a few constellations of their own construction.

Malinowski (1922:68) also mentions a particular Trobriand village, Wawela, as the traditional centre of astronomical knowledge, but its function seems to be restricted to regulation of a calendar and the fixing of significant dates.

Lauer (1976:86) has provided some information on the Amphlett Islanders. Their home is a small group of high islands situated south of the Trobriands.

The Amphlett Islanders do not appear to have developed sophisticated techniques for orientation and navigation. For example, although Amphlett men commonly know many stars by name they do not attempt to use their knowledge of the stars to guide them when sailing at night. The relative lack of sophistication in the navigation techniques of the Amphlett Islands, as well as those of their neighbours in the northern Massim, can probably be explained by the character of the voyages made in the area. The voyages are all short [no more than 75 km.]. Land, except during bad weather, is always visible...And the island targets are all large.

Lewis (1994:126, 134) interviewed two men in 1966 who had participated in the *hiri* trading voyages of the Motu people across the Gulf of Papua and reported using the deep ocean swells and star paths to guide their vessel. No terms were recorded.

Blackwood (1935:380-382) has given a description of voyaging undertaken by Buka people in the N.W. Solomons.

The people of the North Bougainville coast are not great sailors, and seldom venture on trips more than a few miles from the shore. Those of Buka...are more venturesome, and go, on occasion, as far as the island of Nissan, a trip involving little short of a hundred miles, mostly of open and sometimes stormy sea, to buy the pigs for which Nissan is famous.

These voyages are made in paddling, not sailing canoes. Voyages are made at night, and a star path is followed. Although Blackwood does not give this method of navigation by star path a particular name, it is obviously the same technique developed on such a broad scale in Polynesia and Micronesia.

3.2 Navigation in the Admiralties and St Matthias

I have not been able to locate any record of navigation techniques in this area apart from the brief description given by David Lewis on Ninigo, which lies 120 miles west of Manus and the same distance north of New Guinea. Although he sailed with the Islanders in their 50 foot canoes and referred to them as "true deep-sea navigators", his description of their technique is brief, and he does not give local terms. Lewis (1978:93) summarises:

It soon became apparent that it [Ninigo navigation] followed the general oceanic pattern. Steering was by stars rising or setting a little above the horizon; currents were known to vary with the monsoon and trade wind seasons and particular wave forms were regarded as being characteristic of different currents. There was also an unfamiliar high star technique, reminiscent of one sketchily reported from Samoa and the Tokelau Islands, which I was never able to fathom out.

4 Conclusions

Reconstructions of navigation terms for Proto Oceanic, Proto Micronesian and Proto Polynesian are listed in Table 1.

Lewis (1994:353-354), in summarising his findings, has written:

Particular ideas or techniques were favored in different archipelagos in accordance with local geographical and social factors. However, so far as can be determined by haphazardly recorded items of information, and by what is still remembered, the methods used were surprisingly homogeneous. So much so that it would overstep the evidence if one were to speak of separate or typical Polynesian and Micronesian systems. Navigation seems to have been equally efficient in both areas, and the techniques were very often identical.

Accordingly I came to the writing of this paper with the expectation that this similarity would be reflected in the navigation terms collected, explicable either through borrowing or through common ancestry. However, the reconstructions of POC, PMic and PPn terms listed in Table 1 provide very little proof of relatedness, except in less-specialised terms.

There is a fair degree of conformity among the Austronesian speakers of the Pacific in the way they view their physical world of sea and sky. Among the stars and star groups, for instance, Venus is typically labelled as the 'day star' or in association with events of dawn or dusk; Alpha and Beta Centauri are 'the two men'; Taurus is 'tongs'; Polaris is 'the star that does not move'. The horizon, predictably, is 'base of sky' or 'edge of sea'. It has come as something of a surprise, therefore, to find just how few cognate sets can be put together for concepts that are apparently widespread. What is particularly striking is the degree of apparent reinvention of terms for similar concepts. Many are transparent compounds, as if the concept is being described for the first time.

My guess as to why this should be, is to relate it to the fact that these are island communities scattered over a great distance. Each is its own physical world, with its own particular collection of weather patterns and physical features. The stars, for instance, are not only navigational aids; together with the sun and moon they are a community's clock and

calendar. But places separated by 30° latitude will have different seasonal cycles which will be marked by the appearance of different stars. Significant events for a local community will be such things as the time for harvesting breadfruit, the time for particular fish to be plentiful, the time for fair-weather sailing and the time of storms. Local events motivate local names.

The terms which throw least light historically are the most specialised navigational terms. The body of navigational knowledge held by a community was a precious commodity. Taken to extremes, as in Tonga, such knowledge was closely guarded. Here it was held by senior members of particular clans, and passed only to their descendants. Although all members of a community would be aware in a general way that star paths, swells and so on were aids to navigation, the actual terms used would in some places belong to secret usage. But even in less stratified communities, there would have been few skilled navigators at any one time. Arthur Grimble (1931:197) wrote that of the 30,000 inhabitants of the Gilbert Islands in his time (around the 1920's), fewer than 20 could speak with authority about the stars; and "those who have the knowledge are often most unwilling to impart it, for of all the secrets treasured by the native, those connected with navigation are still perhaps the most jealously prized and guarded." And, as has been well exemplified by Stephen Thomas in his 1987 book *The last navigator*, this knowledge could be lost within a generation or two.

So although we can recognise the same navigational techniques, such as the use of star paths and swells in places as far apart as the Papuan Gulf, the Admiralties, the Solomons, Micronesia and Polynesia, and techniques involving a wind compass and deep luminescence in Micronesia and Polynesia, we have virtually no linguistic proof that the terms by which they were described evolved from a common knowledge base. In this case, on the available limited data, linguistics is unable to provide an answer.

However, it seems that gains have been made in another, unexpected, direction. At least in the subgroups for which we have most data, that is, in the S.E. Solomons, Polynesia and Micronesia, the data are unusual in that the terms for what we might describe as cosmic features – heavenly bodies, the horizon, the solstices and the like – are not arbitrary names. They are overwhelmingly descriptive terms, transparent compounds that (a) reflect some specific function of the feature, whether they be calendar or navigation stars, or (b) that underpin their role in creation mythology. The Oceanic Lexicon project, of which this paper is a part, is organised on semantic principles partly in the belief that this will provide a basis for cultural reconstruction. In this sense, I believe that star names have offered us some rare clues as to the values and world view of Proto Oceanic speakers.

Table 1: Reconstructions of navigation terms

Term	POc	PMic	PPn
sky	<i>*lanjit</i>	<i>*lanji</i> <i>*kadawa</i> 'heavens'	<i>*lanji</i>
horizon		PWMic <i>*pai-lanji</i>	<i>*tafaqa-ki-lanji</i>
sun	<i>*qaco</i> 'sun, day' <i>*raqani</i> 'sunlight' <i>*sinaR</i> 'to shine, sun'	<i>*alo</i> 'sun' <i>*raani</i> 'day' <i>*sina</i> 'light, shine'	<i>*qaho</i> 'day, not night' <i>*laqaa</i> 'sun' <i>*maa-sina</i> 'moon'
moon	<i>*bulan</i> <i>*marama(R)</i> 'be light'	<i>*marama</i>	<i>*pula</i> 'to glow' <i>*malama</i> 'moon' <i>*maa-rama</i> 'light, bright'
star (generic)	<i>*pituqun</i>	<i>*fituu</i>	<i>*fetuqu</i>
Venus	<i>*(ma)dala</i>	<i>*matal</i>	<i>*fetuqu-qaho</i> 'day star'
Bird constellation	<i>*manuk</i>	<i>*ma(a)nu</i>	<i>*manu</i>
Pleiades	<i>*bulu</i>		<i>*mataliki</i>
Southern Cross		<i>*pwupwu</i>	
Pointers			<i>*rua tanjata</i>
Orion's Belt	<i>*tolu-</i>	<i>*telu-</i>	<i>*tolu-</i>
Antares		<i>*sumwuri</i>	<i>*mele(mele)</i>
Magellanic Clouds			<i>*maqufu</i>
Milky Way			<i>*kaniwa</i>
star path (that which is steered for)			<i>*kaweija</i>
star rise	<i>*sake</i> 'to rise, upwards'	<i>*sake</i>	<i>*hake</i> 'upwards'
star set	<i>*sipo</i> 'to go down, downwards'	<i>*tupwu</i>	<i>*hifo</i> 'downwards'
	<i>*solo</i> 'mountain, peak'	<i>*zolo</i> 'to disappear (over horizon)'	
N.W. wind and quarter		<i>*tokelau(R)</i>	<i>*tokelau</i>
S.E. wind and quarter		<i>*tonja</i>	<i>*tonja</i>
? wind and quarter	<i>*raki</i> 'dry season of S.E. trades'	<i>*raki</i> 'summer season' assoc. wind and weather	<i>*laki</i> 'westerly quarter'
ocean swell	<i>*ŋalu(n)</i> 'wave, swell'	<i>*ŋalu</i> 'wave, swell'	<i>*ŋalu</i> 'wave'
wave, swell			<i>*peau</i> 'ocean swell, whether breaking or not'
lightning	<i>*lapa(r,R)</i>		<i>*lapa</i> 'flash of light'
open sea	<i>*masawa</i>	<i>*masawa</i>	<i>*wasa?</i>
sea, salt water	<i>*tasik</i>	<i>*tazi</i>	
deep blue sea	<i>*laman</i>		
current	<i>*qaRus</i>	<i>*aus</i>	<i>*qau</i>
reef	<i>*sakaRu</i>	<i>*sakau</i> 'reef, shoal, reef island'	<i>*hakau</i> 'coral reef'

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Computer files in progress:

Bruce Biggs' Polynesian Lexicon (Pollex)

Robert Blust's Austronesian Comparative Dictionary (ACD)

2 *Where did suli come from?*

A study of the words connected to taro plants in Oceanic languages

RITSUKO KIKUSAWA

1 Introduction

1.1 Aim

Proto Oceanic (POc) vocabulary as currently reconstructed contains several forms for taro (*Colocasia esculenta*) as summarised in Ross (1996) and Tryon (1994). However, the Wailevu communalect of Fijian (hereafter WL) has a term *suli* for taro, which is a reflex of none of these forms, but of POc **(j,s)uli*, the semantic reconstruction of which is ‘banana or taro sucker, slip, cutting shoot, etc.’¹ According to Geraghty (1983:344), there are other communalects spoken on Kadavu and Vanua Levu which have the form *suli* for taro. In Standard Fijian the term for taro is *dalo* which is a reflex of POc **talo(s)* ‘taro, *Colocasia esculenta*’,² while *suli(-na)* indicates ‘taro sucker (-POS 3S)’. There are some other languages spoken in the Pacific which also have *suli*-like forms meaning ‘taro’.

In this paper, I will examine the distribution of the reflexes of these two forms, viz., **talo(s)* and **(j,s)suli*, looking for the source of the term *suli* ‘taro’ in WL. It will be shown that there are several possibilities, but the most likely explanation is that the WL term has undergone independent semantic innovation from the reconstructed POc meaning.

¹ Ross (1996) reconstructed the Proto Oceanic form as **(s,j)uli(q)*, keeping the final consonant of Blust’s (1972) PAN form **suliq* ‘tendrill, sucker’. However Ross (pers. comm.) agrees that there is no evidence for the retention of the final **-q* in Oceanic languages.

² Reconstruction by Ross (1996).

1.2 Assumptions and method

There are three possible sources for the WL form *suli* 'taro':

- (i) The form was borrowed along with the introduction of a new kind of taro.
- (ii) The form is the result of an independent semantic development from tendrill to taro in different areas in the Pacific.
- (iii) The form is a reflex of a different protoform meaning 'a specific kind of taro'.

To evaluate these possibilities, I will examine the distribution and regularity of the reflexes in §2 and §3, taking into account also the distribution of the taro plant in the Pacific area.

2 Distribution of PAn **suliq*

The POC form **(j,s)uli* is ascribed to Proto Austronesian (PAn), where it is reconstructed as **suliq* with the meaning 'tendrill, sucker' (Blust 1972). Its reflexes, or reflex-like forms are found all over the Pacific area.

In §2.1, I will provide a list of reconstructed reflexes of PAn **suliq* (Table 1) and a list of *suli*-like forms which indicate 'taro' (Table 2). I will discuss formal and semantic aspects of these forms in §2.2 and §2.3.

2.1 Lists of the forms

(1) Reconstructed forms.

Table 1: **(j,s)uli* and other reconstructed forms³

	Form	Meaning	Source
PAn	<i>*suliq</i>	'runner, sucker, shoot'	Blust (1972)
POc	<i>*(sj)uli</i> ⁴	'banana or taro sucker, slip, cutting shoot (i.e. propagation material)'	Ross (1988)
PPn	<i>*suli</i>	'young shoot'	Walsh & Biggs (1966)
PEO	<i>*juli-</i>	'(banana, taro) sucker'	Geraghty (1983)

(2) List of the *suli*-like forms meaning 'taro'.

³ Abbreviations used in the tables are:

Adm	Admiralty Is.	PPn	Proto Polynesian
CP	Central Pacific	PPT	Proto Papuan Tip
MM	Meso-Melanesian	PT	Papuan Tip
NCV	North Central Vanuatu	SES	South-East Solomonian
NNG	North New Guinea	SV	South Vanuatu
PEO	Proto Eastern-Oceanic	WMP	Western Malayo-Polynesian
PN	Polynesia		

⁴ Blust (1972:27) reconstructed the POC forms as **suli* 'shoot, sucker (of banana or taro)'.

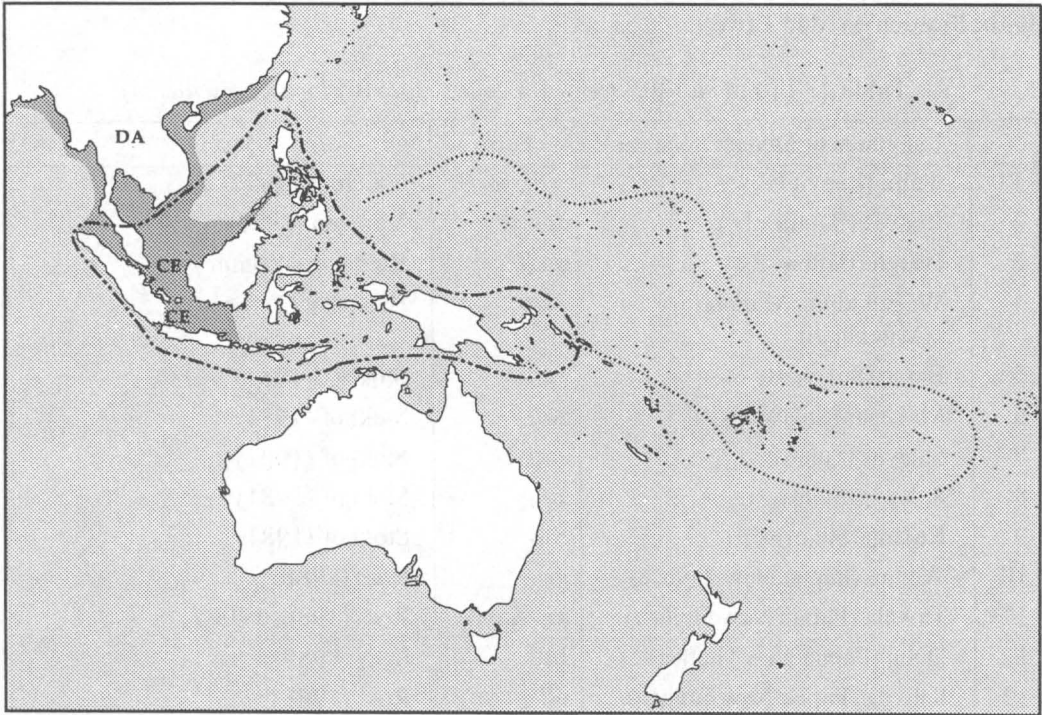
Table 2 is a list of the languages which have *suli*-like forms which mean 'taro' (*Colocasia esculenta*). The number at the beginning of each language indicates the reference to the location on Map 1 over.

Table 2: List of *suli*-like terms for generic taro (*Colocasia Esculenta*)

	Language or Dialect (location)	Form	Source
1	Yami (Lanyu Is .)	<i>suli, sōri</i> ⁵	Tsuchida (1977)
2	Itbayat (Batanes Is.)	<i>solì</i>	Yamada (1973)
3	Ivatan (Batanes Is.)	<i>sudi</i>	Reid (pers. comm.)
4	W. Bukidnon Manobo (Mindanao)	<i>suli</i>	Blust (1972)
5	Baree (Sulawesi)	<i>suli</i>	Stokhof (1981)
6	Makasar (Sulawesi)	<i>suli</i>	Stokhof (1981)
7	Salayar (Sulawesi)	<i>suli</i>	Stokhof (1981)
8	Salayar (Sulawesi)	<i>suli</i>	Stokhof (1981)
9	Kajang (Sulawesi)	<i>suli</i>	Stokhof (1981)
10	Wedau (Papua New Guinea)	<i>uri</i>	Ross (1988)
11	Tawala (Papua New Guinea)	<i>uni/huni</i> ⁶	Ross (1988, 1996)
12	Dobu (Papua New Guinea)	<i>suli</i>	Ross (1988)
13	Kilivila (Papua New Guinea)	<i>uli</i>	Ross (1988)
14	Nehan (Papua New Guinea)	<i>hon</i>	Ross (1996)
15	Chamorro (Guam)	<i>sunì</i>	Topping, Ogo & Dungca (1975)
16	Trukese (Micronesia)	<i>óni</i>	Goodenough & Sugita (1990)
17	Sa'a (1) (Solomons)	<i>hui</i>	Tryon & Hackman (1983)
18	Sa'a (2) (Solomons)	<i>hui</i>	Tryon & Hackman (1983)
19	Oroha (Solomons)	<i>hui</i>	Tryon & Hackman (1983)
20	Ulawá (Solomons)	<i>hui</i>	Tryon & Hackman (1983)
21	Uki Ni Masi (Solomons)	<i>hui</i>	Tryon & Hackman (1983)
22	Haununu (Solomons)	<i>aaro/hui</i>	Tryon & Hackman (1983)
23	Rawo (Solomons)	<i>hui</i>	Tryon & Hackman (1983)
24	Wailevu (Kadavu, Fiji)	<i>suli</i>	Kikusawa (fieldnotes); Geraghty (1983)

⁵ With the meaning 'swamp taro'.

⁶ The forms are *uni* in Ross (1988); *huni* in Ross (n.d.).



Approximate area of origin of:

CE *Colocasia esculenta*

DA *Dioscorea alata*

■ Approximate extent of Sundaland at sea level - 100m

--- Distribution of wild *Cyrtosperma*
related to *C. chamissonis*

..... Main zone of cultivation of *C. chamissonis*

Map 1: The distribution of wild *Cyrtosperma* and the main zone of cultivation of *Cyrtosperma*

(Figure 6.1 in Bellwood 1978, modified)

2.2 Formal aspects of the *suli*-like terms

- (1) Among these forms, those in the Western Malayo-Polynesian languages show regular sound correspondences while those in Oceanic languages (10 to 23 in Table 2) show irregular correspondences. The Fiji forms show regular correspondences.
- (2) The Papuan Tip data, viz., 10–13 (Table 3), are from Ross (1988:75) where they are given as reflexes of the POc form **(sj)uli(q)*, but with a footnote which claims that they are “possibly not cognate[s], in view of semantic difference[s]”. Except for the term *uni/huni* in Tawala, each of these forms shows some irregularity in the consonants according to the table of sound correspondences in the same source (Ross 1988:198–200, 204, 219–221).

Table 3: Sound correspondences in Papua New Guinean languages

	Language	Forms				
	POc	*(j,s)uli	*j	*s, *c		*l
	PPT	*(s,z)uli	*j	*s (fortis)	*s (lenis)	*l
10	Wedau	uri	t, d	ɣ	∅	n; ∅ / _i
11	Tawala	(h)uni	d	g	h, ∅	n
12	Dobu	suli	d	s	s	n; ∅ / _i; l_ *#
13	Kilivila	uli	d, s	l	s	l; ∅ / _i
14	Nehan	hon	–	s	h	l

- (3) All the forms found in the Solomon Islands (17–23) show irregular sound correspondences as shown in Table 4. Since both of the consonants in each form show unexpected reflexes in every language and the forms are identical throughout the languages, I assume that these forms were possibly borrowed recently from (an)other language(s) and have spread over the area, but the source is hard to determine at this point.

Table 4: Sound correspondences in Solomon Island languages

	Language	Form for 'taro'		
	POc	*(j,s)uli	*s	*l
17	Sa'a (1)	hui	t, s ⁷	l
18	Sa'a (2)	hui	t, s	l
19	Oroha	hui	t, s	r
20	Ulawa	hui	t, s	l
21	Uki ni Masi	hui	t, s	l
22	Haununu	hui	t, s	r
23	Rawo	hui	t, s	r

Another possibility is that these forms have all descended from a single protoform which was different from *suli but considerably resembled it, and that this second form has been the one that has been reflected as *hui* in the modern languages. However, if this is true, it is expected that the reflexes would have different forms after having undergone certain historical changes in each language, while what we actually find is that all of these languages share an identical form. Therefore, this is unlikely.

- (4) The following information and comments may prompt further study. The numbers after language names refer to Table 2.

(a) Itbayat (2) had some contact with Yami (1) (Yamada 1973)

(b) Ivatan (3) and Yami (1) are considered to be closely related (Reid 1966:1)

⁷ Reflexes of POc *s are /s/ before high vowels, /t/ elsewhere.

- (c) Salayar (7) and Salayar (8) have identical names, but are spoken in different places.
- (d) The forms in languages spoken in Papua New Guinea (10–13) and in North-West Solomon Islands (14) show irregular sound correspondences except for Tawala (11) as discussed in point (2) above.
- (e) For Chamorro (15), whether the sound correspondences are regular or not has not been clarified yet.
- (f) The form in Trukese (16) appears to be cognate on the surface. However, Trukese has a regular reflex, viz., *ini-* ‘shoot, short sucker, runner (as of banana, taro, bamboo)’. Also, the form *óni* itself is irregular with respect to the current phonological system of the language (Sugita pers. comm.).
- (g) All the forms in the Solomon Island languages (17–23) show irregular sound correspondences as discussed in point (3) above.

2.3 Semantic aspects of the *suli*-like terms

- (1) The regular reflexes of **(s,j)uli* have a wide variety of meanings including: a kind of banana; domestic banana plant; sprout, sprout of banana or pineapple; sucker from roots of a plant, taro shoot with leaves. Ross reconstructed this protoform with the meaning ‘banana or taro sucker, slip, cutting, shoot (i.e. propagation material)’. Forms which are possible reflexes of **suliq* and have meanings other than ‘taro’ are listed in Table 5.

Table 5: List of reflexes of PAN **suli*

Area	Language/dialect	Form	Meaning	Source
WMP	Tagalog	<i>suwi</i> ⁸	shoot (of bananas, etc.)	Blust (1972)
WMP	Javanese	<i>sulih</i>	successor	Blust (1972)
Adm	Nauna	<i>culi-</i>	taro shoot	Ross (1988)
Adm	Lou	<i>sili-n</i>	sprout: sprout of banana or pineapple	Ross (1996)
Adm	Loniu	<i>cili</i>	sprout, esp. banana shoot	Ross (1996)
NNG	Manam	<i>suli</i>	banana slip, cutting	Ross (1996)
NNG	Gedaged	<i>dul</i>	yam fibre	Ross (1988)
NNG	Bilbil	<i>duli-</i>	yam fibre	Ross (1988)
NNG	Lukep-Pono	<i>suli-</i>	banana shoot	Ross (1996)
NNG	Numbami	<i>duli</i>	taro sucker	Ross (1996)
NNG	Yabem	<i>s̥ili</i>	tendrill, sucker	Ross (1988)
NNG	Tami	<i>jili</i> ⁹	taro sucker	Ross (1996)
PT	Motu	<i>dui</i>	banana plant	Ross (1996)
PT	Lala	<i>dungi</i>	banana plant	Ross (1996)
PT	Roro	<i>tsui(ara)</i>	kind of banana	Ross (1996)
PT	Mekeo	<i>ui</i>	domestic banana plant	Ross (1996)

⁸ “PAN [=PAN] **l* sometimes disappeared in Tagalog...Conditions cannot be stated” (Blust 1972).

⁹ Ross (1988) gives *juli* ‘tendrill, sucker’.

MM	Roviana	<i>zuli</i>	transplant (seedling)	Ross (1988)
SES	Gela	<i>duli</i>	banana sucker	Ross (1988)
SES	West Guadalcanal	<i>duli</i>	line, kin	Ross (1988)
NCV	Mota	<i>suli(u)</i>	sucker from roots of a plant	Ross (1996)
SV	Anejom	<i>ni-sje-n</i>	taro shoot with leaves	Ross (1996)
CP	Fijian	<i>suli</i>	banana or taro sucker	Walsh & Biggs (1966)
PN	Samoa	<i>suli</i>	young shoot (of banana)	Walsh & Biggs (1966)
PN	East Uvea	<i>huli</i>	young shoot	Walsh & Biggs (1966)
PN	Tongan	<i>huli</i>	young shoot	Walsh & Biggs (1966)
PN	Rarotongan	<i>?uri</i>	young shoot, seed	Walsh & Biggs (1966)
PN	Marquesan	<i>hu?i</i>	young shoot, seed	Walsh & Biggs (1966)
PN	Easter Island	<i>huri</i>	banana shoot	Walsh & Biggs (1966)
PN	Maori	<i>huri</i>	young shoot, seed	Walsh & Biggs (1966)
PN	Hawaiian	<i>huli</i>	taro top (used for planting)	Walsh & Biggs (1966)
PN	Nukuoro	<i>uli</i>	a sprout of a plant suitable for planting	Carrol & Soulik (1973)

- (2) The meanings of most of these forms are related to either 'banana' or 'taro' or both, while a few forms relate to 'yam', another important root crop in Melanesia. It may be worth examining also terms related to 'yam', since the existence of a few forms implies the potential existence of others in languages which have not been described yet.

3 Distribution of POc **talo(s)*

Talo-like forms are consistently reconstructed with the meaning 'taro, *Colocasia esculenta*'. They are found in the Western Malayo-Polynesian languages spoken in the Malay peninsula and in areas towards the East and all over Oceania. The terms seem to be less problematic both formally and semantically than *suli*-like forms. Most of the reflexes show regular sound correspondences and indicate '(generic) taro, *Colocasia esculenta*'. The reconstructed forms are as follows.

Table 6: **Talo(s)* and other reconstructed forms

	Form	Meaning	Source
PAn	<i>*tales</i> ¹⁰	<i>Colocasia esculenta</i>	Wolff (1994:536)
PMP	<i>*tales</i>	taro, <i>Colocasia esculenta</i>	Dempwolff (1938)
POc	<i>*talo(s)</i> ¹¹	taro, <i>Colocasia esculenta</i> (syn. <i>Colocasia antiquorum</i>)	Ross (1996)
PPn	<i>*talo</i>	taro	Walsh & Biggs (1966)

¹⁰ Although Wolff ascribes this to PAn, it seems to be controversial. For example, Pawley and Ross (1993:443) claim "a group of terms for root crops are attributable to PMP but not to PAn", including **tales* 'taro, *Colocasia* sp.'.

¹¹ Grace (1969) **nalo(s)*.

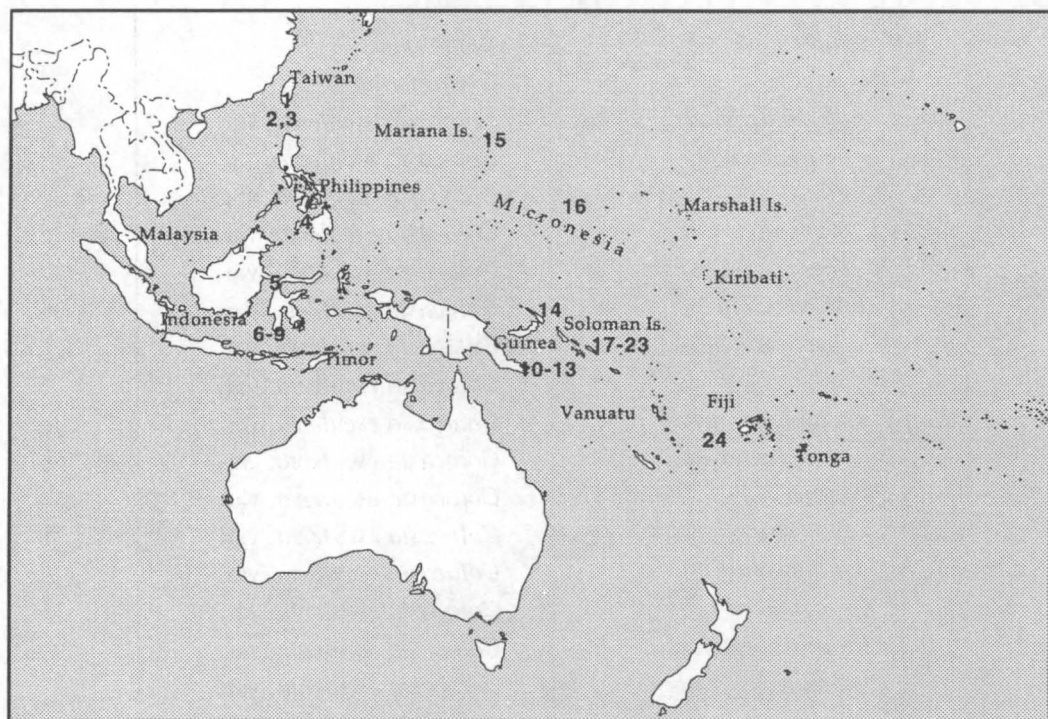
The reflexes are found from Malay in the west to Minahasa and Javanese, and in most Melanesian and Polynesian languages. Although most of them show regular sound correspondences, it should be noted that this somewhat corresponds to the area where English based pidgin languages were, or still are spoken, where the term for 'taro' must have been either *talo* or *taro*.

There is not much of a problem semantically, as all of them indicate 'taro, *Colocasia esculenta*' except for Lewo in North Central Vanuatu, where *tale* means 'kind of greater yam' and Kwaio in the South East Solomons, where the reflex means 'a unit of a hundred taro for a feast' (Ross n.d.:10).

4 Discussion

- (1) *Suli*-like forms are found all over the Pacific area. Those meaning 'taro' have been found in the Western Pacific area. In the six areas where Oceanic languages have *suli*-like forms for 'taro', all of the forms show irregular sound correspondences, except for the one in Fijian. At this point, it is impossible to find any relation between the distribution of the *suli*-like forms and that of the *talo*-like forms, and I will just point out that in Haununu, spoken in San Cristobal, both a *talo*-like form and a *suli*-like form occur, viz., *aaro* and *hui*, both meaning 'generic taro'. In this language, the form *aaro* shows regular sound correspondences, while *hui* is irregular.
- (2) From the fact that WL and some other Fiji communalects are the only languages in Oceania where the *suli*-like term shows regular sound correspondences, it is most likely that the meaning 'taro' was an independent semantic innovation. This assumption raises the following questions:
 - (i) How likely is it that the reconstructed meaning could change to '(generic) taro' independently in different areas?
 - (ii) What are the source(s) of the terms which are probably borrowings?
- (3) Regarding question (i) in (2) above, the meanings of the reflexes seem to be divergent at first glance. However, they can be summarised as follows, 'a side part of a plant which newly comes out of the ground; descendant'. From this point of departure, it may be possible to find even more reflexes which have undergone semantic change to meanings other than those already identified.
- (4) Still with regard to question (i) in (2) above, in addition to the term *talo*, Samoan has another term *fua-a-uli* which means 'taro (as a whole)', *fua* meaning 'fruit' and *uli* meaning 'small corm which grows under the sucker (*lauvai*) of a taro plant' (Milner 1966). According to Milner (1966), the form *fua-a-uli* is also a polite word for 'chief'. Samoan also has a reflex of **(j,s)uli(q)* showing regular sound correspondences: *suli* 'young shoot (of banana)' (Walsh & Biggs 1966). These facts probably merit further study.
- (5) The distribution of *suli*-like forms meaning 'generic taro' corresponds to the distribution of the wild *Cyrtosperma*, which is related to *Cyrtosperma chamissonis*, as well as to the main zone of cultivation of *Cyrtosperma chamissonis*, according to a summary of the distributions of some major Pacific food plants in Bellwood (1979).

There are no such forms found outside of these zones (Map 1 and 2). The currently reconstructed POc form for 'swamp taro', which may be the closest to what is technically called *Cyrtosperma*, is **bulaka* (Blust 1972).



Map 2: The distribution of *suli*-like terms indicating '(generic) taro'

- (6) Even though it is likely that the form in Wailevu developed the meaning 'taro' independently, there is a possibility that the protolanguage distinguished different kinds of taro, one of which could have been something like *suli*. More data are needed, and further semantic examination is also required.
- (7) With reference to the borrowings of terms related to taro, I would like to mention the following two points. First, it is only Fijian and Polynesian languages which have a generic term which covers *Colocasia* and (an)other taro-like plant(s). In Western languages a generic term as such does not exist.¹² The other point is that there is a possibility that *talo*-like terms in Western Melanesian languages, and possibly in other languages too, may have been borrowed from Pidgin English, as pointed out by Ross (1988).

¹² The fact that 'taro' is a more important part of the local diet in Polynesia compared to that in Western areas may have something to do with this (Rehg 1995 pers. comm.).

(8) WL terms for kinds of taro are shown in Table 7.

Table 7: Wailevu terms for specific kinds of taro

Form	Notes
<i>via</i>	<i>Alocasia</i>
<i>suli(i)tana</i>	<i>Xantosoma</i>
<i>viaxau</i>	<i>Cyrtosperma</i>
<i>bāvia, dromodromo</i>	<i>Colocasia esculenta</i> , var.
<i>beranabuxeje</i>	<i>Colocasia esculenta</i> , var.
<i>iloilo</i>	<i>Colocasia esculenta</i> , var.
<i>māxutu</i>	<i>Colocasia esculenta</i> , var.
<i>nayova</i>	<i>Colocasia esculenta</i> , var.
<i>nereō damu</i>	<i>Colocasia esculenta</i> , var.
<i>nereō vulavula</i>	<i>Colocasia esculenta</i> , var.
<i>oriori</i>	<i>Colocasia esculenta</i> , var.
<i>sāmoa damu</i>	<i>Colocasia esculenta</i> , var.
<i>sāmoa vulavula</i>	<i>Colocasia esculenta</i> , var.
<i>sadri</i>	<i>Colocasia esculenta</i> , var.
<i>sexasexa</i>	<i>Colocasia esculenta</i> , var.
<i>sulinivāmau</i>	<i>Colocasia esculenta</i> , var.
<i>sulizina</i>	<i>Colocasia esculenta</i> , var.
<i>taulasanisāmoa</i>	<i>Colocasia esculenta</i> , var.
<i>tōxula</i>	<i>Colocasia esculenta</i> , var.
<i>vavai</i>	<i>Colocasia esculenta</i> , var.
<i>volo</i>	<i>Colocasia esculenta</i> , var.
<i>vorēnavara</i>	<i>Colocasia esculenta</i> , var.
<i>vujixoto</i>	<i>Colocasia esculenta</i> , var.
<i>vulalima damudamu</i>	<i>Colocasia esculenta</i> , var.
<i>vulalima vulavula</i>	<i>Colocasia esculenta</i> , var.
<i>xuroxece baci</i>	<i>Colocasia esculenta</i> , var.
<i>xuroxece vinaxa</i>	<i>Colocasia esculenta</i> , var.

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3 *The true prepositions/ casemarkers in Proto Oceanic*

JOSEPH C. FINNEY

1 Introduction¹

1.1 Preliminary comments

This work studies prepositions (PREP) and casemarkers (CM), categories which we shall usually combine as PCM. We begin with certain postulates about which PCMs, coming down from Proto Austronesian (PAN) and Proto Malayo-Polynesian (PMP), entered Proto Oceanic (POc) by direct inheritance. These are all monosyllables of CV structure. We won't deal with new prepositions emerging from locative nouns or from serial verbs except to note that as lenition gradually erodes understandability, longer words or phrases must be substituted or added. The present effort is more interested in finding relics of the ancient ones than in elaborating on the invaders.

We tend to say 'casemarkers' when a PCM becomes more highly grammaticalised, more purely syntactic, with less specific semantic content, and/or, by lenition, tends toward becoming a clitic and eventually an affix.

Although the postulated PCMs are based on evidence, it is beyond the scope of this paper to test and prove them. We take them as given, and search the Oceanic languages for the PCMs that should appear as descendants of the postulated ones.

When reference to the PAN consonant *C is needed, I'll write it in lower case ('c'), to allow 'C' and 'V' to be used for generalised Consonant and Vowel.

Two principles used in the study are worth mentioning. Principle 1: Take the simplest explanation. If an attested form can come from an acceptable protoform, take that as its source; don't concoct a theory to create it *ex nihilo*. Principle 2: Postulate an irregular

¹ I am grateful to David Zorc for giving generously of his time to advise me about the Philippine languages. Malcolm Ross kindly corrected some of my errors, and graciously sent me some pages from work of his in press. Andy Pawley advised me on improving the logical structure of the paper. Advice from Bob Blust and Paul Geraghty on an earlier paper remained of value. None of them, of course, is responsible for any errors remaining in this work.

phonological change only as a last resort. If available, take an explanation that does not need any irregular sound change ad hoc.

As an example of the logic used here, consider the accepting or rejecting, as ancestral, of (1) the *lo* particle, which Ross (1988:287) calls a preposition innovated in Western Oceanic, and (2) the *ta* which Pawley (1973:147-148) called a true preposition, but Ross (1988:104-106) called an old noun. This study calls *ta* and not *lo* a possible true PCM because *ta* and not *lo* occurs as such in Formosan languages; and because *lo* and not *ta* has a plausible noun source, the locational noun *lalo*. Ross is right (1988:287) both in seeing **la/*lo* as an old inalienable locative noun and as seeing that it has become a preposition in the New Ireland languages. But the standing of *ta* in Ross's languages is less clear. For the Mussau language Ross (1988:117) shows:

- (1) *e-ta-ira*
PREP-PREP-3PL²
'for them'

but the occurrence of two successive prepositions is problematic. The *ta-* seems to be a grammaticalised determiner (casemarker), and its ancestry can be a PAn preposition **ca/*ta* or else a PAn demonstrative **cV* (which for PMP is most easily reconstructed **tu < *cu* with the allowable variation among three vowels).

1.2 Postulated cases

It is assumed that the 'focus' case system, found in Formosan and Philippine languages, was essentially what late PAn had. (Starosta 1974 may be right in contending that Rukai branched off from mainline AN before that system developed, though it is also possible that Rukai's ancestor had that system and lost it, as the ancestors of many MP languages did.) The system had at least the three cases found in Tagalog. Case 1 has been called the topic or focus. Evidence suggests that it began as a topic but became absolutive or nominative, and so

2 Abbreviations used in this paper:

IS.BN	first singular benefactive	O	object particles
2SG	second person singular	OBJ	object
3PL	third person plural	PAn, PAN	Proto Austronesian
3SG	third person singular	PCEMP	Proto Central Eastern Malayo-Polynesian
A	actor/agent particles	PCM	prepositional casemarkers
AN	Austronesian	PEMP	Proto Eastern Malayo-Polynesian
ART	article	PF	perfective
*c	Proto Austronesian consonant	PMP	Proto Malayo-Polynesian
C	consonant	PN	personal name
CEMP	Central Eastern Malayo-Polynesian	POc	Proto Oceanic
CM	casemarker	POSS	possessive
CONJ	conjunction	PREP	preposition
CV	consonant, vowel	PSHNNG	Proto South Halmahera North New Guinea
DEM	demonstrative	SRP	inner nominative pronoun
DIR	directional	TAM	tense, aspect, mode
EMPH	emphatic	V	vowel
GEN	genitive	WMN	Western Melanesian
IRR	irrealis	WMP	Western Malayo-Polynesian
LOC	locative	<	comes from
MP	Malayo-Polynesian	>	goes to
NomAc	nominative accusative		

acquired some characteristics of the syntactic subject of the sentence, regardless of its semantic role. Affixes on the verb provide a partial mapping of semantic roles onto the syntactic cases.

Case 2 has genitive role (linking a noun to another noun), and is also used as the marked agent ('ergative' or passive), an agent (doer) that is not the focus nor a nominative subject. Its occasional 'from' role (*na*, *no*, Williams & Williams 1956:14, 15) is almost certainly a survival from earliest PAn, as (space) 'from' words tend to evolve into 'of' and 'by' words and not the reverse. Thus we get a small glimpse into a pre-PAn or early PAn state that preceded 'focus' syntax.

Case 3 is used for space relations (location or motion to/from) and for a broad variety of other semantic roles, such as time, dative, benefactive, causative, comitative, means, and manner. POC's ancestor, PCEMP, abandoned the focus system for a new Nominative-Accusative (NomAc) syntax, though its PCMs show their ancestry.

1.3 Functions of the initial consonants of ancestral PCM

It is postulated that the syntactic case and semantic role of each PCM was determined anciently by the consonant. In MP only six initial consonants, including zero, were used in PCMs, but most of them (zero, /s/, /k/, if not /t/ and /d/) seem to have been used for both Case 1 and Case 3. As PAn **c* and **t* merge in PMP, we need not consider the Formosan evidence that PAn had both **c*- and **t*- PCMs. The paradigm postulated here includes:

- zero- Case 1 topic, focus, nominative, absolutive
- zero- Case 3 locative, mostly with /i/ vowel
- n*- Case 2 genitive, ablative, ergative, complement
- s*- Case 3 dative, allative, adjuncts, usually *sa*
- s*- Case 1 nominative, usually *si* for persons only
- k*- Case 1 topic, nominative, presentive
- k*- Case 3 allative, comitative, dative, adjunct
- t*- Case 3 locative, accusative, allative, others
- d*- Case 3 locative, accusative, others. It is *r*- in Oceanic.

Case 1 in *t*- and *d*- is more elusive. The six initial consonants (including zero) are seven in PAn, as two PAn consonants merge as *t*- in PMP.

The similarity of *t*- and *d*- in both phonology and usage suggests the possibility of a common prehistoric origin with some unknown element present in one of them; but that issue involves pre-PAn and may never be resolved.

The *n*- morph is the best established of all. It is also the simplest and clearest. Case 2 had only the *n*- marker; the *n*- marker was used only in Case 2; and Case 2 was clearly defined.

It is curious that in five of the seven reconstructible PAn PCMs the consonant is in the dental-alveolar range of articulation (PAn **n*, **s*, **t*, **c*, **d*) with only zero and **k* as exceptions. Is that a chance happening, or did something of interest happen in pre-PAn?

1.4 Functions of the vowels of ancestral PCM

The vowels anciently marked certain classes of substantives, but no simple paradigm seems to cover this matter. For the consonant *n*-, the one most certain to have occurred with

all three vowels in PAn, and what seems clearest from examining Philippine and Atayal languages (Schachter & Otnes 1972; Huang 1994; Li 1995) is that *i-* was used for proper names of persons (and perhaps places), personal pronouns, and some demonstrative pronouns; and *a* for nonspecific common nouns. A table (slightly adapted for clarity from Huang 1994:97) shows the vowels and classes as:

Casemarking, Genitive, for Nouns:

Common:	nonreferential [nonspecific]: <i>na'</i>
Referential [specific]:	<i>nku'</i>
Proper [always referential and specific]:	<i>ni'</i>

[An unidentified vowel is elided between *n* and *k* in the second line.]

In Chamorro (Topping & Dungca 1973:133-135), where *i* is a specific article that cannot occur before a pronoun, *nu* + *i* is contracted to *ni*. In Paiwan (Ferrell 1981), where *ni* is 'of' before personal pronouns and names of persons, *nu* or *nua* or (contracted to) *na* is used before common nouns. Those two contractions suggest that the ancient PCM was the *-u* form, and that PCMs in *-i* and *-a* are contractions of it with article **i* for persons or proper names and **a* for (nonspecific?) common nouns. Furthermore, Paiwan (Ferrell 1981:12) shows *tua* (PAn **sua*) beside *tu* (PAn **su*) as the *-focus*, non-agent 'construction marker'. This fits our definition of a Case 3 marker. His example 'the bird grasped the stone' seems accusative. Ferrell's 'construction markers' show only the 'syntactic slot', in contrast to case-markers, which, he says, should show also semantics. And for Kanakanavu, Li (1997:353) shows *sa* and *sua* as alternative forms of a casemarker. So we have evidence from languages in three different primary branches of AN, that casemarkers *Ci* < *Cui* < *Cu i*, and *Ca* < *Cua* < *Cu a*. Chamorro supports the hypothesis for *nV*, Kanakanavu supports it for *sV*, and Paiwan supports it for both.

So what the evidence suggests is that the PCMs in *-u* may be the most ancient ones; and that those in *-i* and *-a* were formed from the *-u* forms plus an article, *i* for reference to persons or proper nouns, or *a* for nonspecific common nouns. The simple *Cu* form may have remained for nouns fulfilling neither the *-i* nor the *-u* requirement.

For the other initials (zero, *k*, *d*, *t*, *c*) the same process may have taken place. On the other hand, some of them (perhaps the vowel alternatives to the locative *i* and possibly *di*) could have arisen later by analogy with the ancient **n-* and **s-* forms.

This explanation accounts for evidence that had been noted before by others. Zorc (pers. comm.) said that in the Central Philippine languages, regardless of the consonant, *-u* is the most specific, *-i* is indefinite-nonspecific, and *-a* is perhaps neutral, though specific-definite for Case 3 common nouns. Malcolm Ross (pers. comm.) suggested that the vowel is *i* for personal pronouns and names and for indefinite common nouns; but *a* for common nouns of things present, and *u* for common nouns of things absent.

It is agreed that PAn had only four vowels: *a*, *i*, *u*, and an indefinite ('schwa') that can be written 'e' and became *o* in Oceanic. Vowels 'e' and 'o' in attested words, including PCMs, are usually from PAn **i* and **u* respectively. In CVCVC words, PAn final **-ay* > *e* and **-aw* > *o*. In Oceanic examples, when a PCM is attested as *-o* or *-e*, it will be regarded as ancestrally **-u* or **-i*, respectively, in the absence of any other explanation.

The archaic PCMs in *-u/-o* are somewhat scarce in Oceanic and other CEMP languages today. Beginning perhaps with prehistoric Wolio and the adjacent Proto CEMP, the PCMs with vowel *i* came to predominate. But forms with varying vowels are found scattered

widely. Collins (1983), based in part on Reid (1978), hypothesised either **u* or **su* as nominative marker for Proto Central Maluku in Seram, Central MP.

1.5 Some problems with the vowel + consonant system

One possible paradigm is that all the initials occurred with all three vowels. This is very simple and elegant. A purpose of this paper is to explore to what extent it is supported by evidence. It works best for the *n* and *s* forms, the ones for which we have evidence that the *-a* and *-i* variants arose from earlier *-u*.

For other initials, especially *k* and *s*, the list of cases and markers suggests two problems to be solved: (1) How are the Case 1 and Case 3 interpretations distinguishable to the hearer? (2) To what extent were the consonants of the casemarkers in free variation, within Case 3 (zero, **k*, **t*, **d*, **s*) and within Case 1 (the same repertory)? A full answer to the two questions may be attempted in a future study. A partial answer is that the vowel paradigm derived from *n* may not have applied to all initials. Initial zero in Case 3 in PAn may have been strictly locative, not used for direction or broader Case 3 meanings; and in PAn it may have had only the *i* vowel.

Part of the answer to question (2) is that PAn may have been like Amis as described in Chen (1987) in having two different cases (zero consonant as predicate noun and topic, and *k-* as nominative-absolutive) that merged into Case 1 in the emerging 'focus' syntax. Evidence in Amis is that the **kV* marker moved from topic use to nominative sooner than the **zeroV* did.

The point of question (1) is that use of the same initial for Cases 1 and 3 could result in ambiguity, but this has seldom, if ever, been a problem. A partial answer to question (1) is that only in Reid's (1974) Central Cordilleran language group is PCM *s-* allowed to occur with the same vowel in Cases 1 and 3, and even in that group, no language seems to have identical phonology for the two cases in the same person and number. For *s*, the oldest Case 1 usage probably was restricted to vowel *i* and restricted to singular proper names of persons; and the oldest Case 3 usage of *s-* may have been restricted to vowel *a*. Reid (1974:534) shows *s* used in both cases, singular, with vowel *-i* in Central Cordilleran languages, but Case 1 only for 'personal' and Case 3 only for 'common' substantives.

For *k-*, I don't know any language that has it in both Cases 1 and 3 with the same vowel. A partial exception is Rukai, in which one case has an *a/i* distinction based on specificity. And for initial zero, languages with broad use of Case 3 *i*, such as (WMP) Wolio (Anceaux 1987:45) and Oceanic, have generally lost, reduced or hidden the Case 1 *i*.

1.6 Demonstratives with casemarking

In Austronesian as in Indo-European, third person pronouns, articles, and demonstrative adjectives (determiners), often have a common origin in demonstrative pronouns. PAn **i(y)a(n)*, recognised by Dempwolff (1938), is the demonstrative that most commonly develops into 3SG in MP tongues. In PMP and Proto Central Philippine, and Formosan languages such as Atayal, are seen signs that the PCMs in *-i* merged with pronoun *(i)(y)a(n)* to the right, forming left-casemarked pronouns. The formation of Case 2 *niya* and its later course were well discussed by Blust (1977) and others. It is attested, for example, in Tagalog *niya* (Schachter & Otanes 1972:88). Blust noted its slight lenition to *nya* (and thence to 'palatalised' *-a* in POc), a process he thinks may have occurred independently in many

branches of AN. Tagalog also has *siya* and *diyan* (Schachter & Otnes 1972:88, 91). Less noticed has been Atayal *kya* glossed 'to it' and 'there' (Rau 1992:75, 227). In Oceanic and Indonesian, Case 3 role tended to bleach out. In Oceanic, the demonstrative *tia* appears as a predicate nominative marker in Fijian (Geraghty 1983:232) and its possible lenition as an article, *te*, *ta*, *ti*, has shown a powerful presence in Polynesian and Micronesian languages.

A fuller account is in Finney (1997). In that account I accepted Dempwolff's reconstruction of PMP pronoun **ia*. Now I see it as more parsimonious to reconstruct the PAn and PMP pronoun simply as **a*. The occasional forms that point to **ia* as the pronoun (having a different PCM on its left) seem to be later reanalyses occurring after grammaticalisation. This new approach allows us to posit a full set of PAn or PMP demonstratives, all light monosyllables **(C)V*.

When the new nominative-accusative syntax of POc appeared, requiring preverbal subject pronouns, the 3SG forms available were *(i)a* descendants. Doublets were available, drawn from the old Case 1 with zero initial (old agent focus, nominative or absolutive) and the old Case 2 (with the agent in *n-*, ergative, from the old voices in which the nominative slot was occupied by something other than the agent). Most Polynesian languages have the preverbal subject 3SG as *na*, old Case 2, but it is (old Case 1) *e* in Fijian and *i* in the Polynesian languages of West Futuna and Aniwa (Dougherty 1983:34).

1.7 Forms in PAn, PMP, PCEMP, PEMP, PSHWNG, and POc

In the generally accepted theory of Blust, the successive proto levels from the top down to Oceanic are Proto Austronesian, Proto Malayo-Polynesian, Proto Central-Eastern Malayo-Polynesian, Proto Eastern Malayo-Polynesian, Proto South Halmahera North New Guinea, and Proto Oceanic. Little is said here about the varying phonological forms of the PCMs at the several levels. The vowels, as noted, have changed minimally from PAn down to POc, and not much even within Oceanic. Among the consonants, *n-* has the clearest syntactic and semantic functions, and persists in a great number of languages today. The forms *ni* and *na*, which must have occurred by late PAn, occur unchanged in many Oceanic languages, and with much the same semantic role. The other initials, zero, *s*, *k*, *t* and *d*, also stayed unchanged from PMP all the way down to POc, although recently it has become customary to write **r* for what was formerly written POc **d*.

In presenting the PCMs of Oceanic languages, we'll deal briefly with those best known and most firmly established, and give longer discussion to those (such as *sa*) which are suggested here for the first time as Proto Oceanic.

2 Forms in Oceanic languages

2.1 A full set, all in *-i*

Arosi (Fox 1978), an Oceanic language of San Cristobal in the SE Solomons, has five 'prepositions' in *-i*, all glossed as 'of, belonging to', a genitive translation. They are: *i*, *ni*, *ki*, *ri*, and *si*. In §2.5.2 we'll note evidence that *ti* merged into *si*, and so the set may represent six initials. Attested forms in other Oceanic languages, too, are sufficient to show that ancestral forms **i*, **ni*, **ki*, **ti*, and **di* > **ri*, all found in Western MP, can be reconstructed for POc.

It is recognised that *i*, in all likelihood, was by source a locative preposition in the narrow sense. Likewise, evidence suggests that all of these PCMs began as prepositions of space. Only *ni* was a genitive in PAN, and it also had 'from' semantics. What we see here is the locative-allative prepositions invading the genitive field as in their own fields they are slowly replaced by old nouns or serial verbs. That happens in many language families. Contrariwise, in other Oceanic languages, *ni* can invade the field of other space relations. In Tungaru (Gilbertese, Kiribati) *ni* or *n* is glossed 'at, in, for, to' (Sabatier 1971). (We should say Sabatier and Oliva, as Sister Oliva, though modestly calling herself a mere translator of the Gilbertese-French dictionary into Gilbertese-English, was fluent in all three languages and must have used her own judgment.)

2.2 Oceanic PCMs in zero-

2.2.1 Oceanic PCMs *u*, old Case 1

In Formosan (Starosta 1974), *u* or *o* marks elements found in Amis (topics and predicate nouns) and in Tsou (less easily defined). Chen (1987) confirmed them in Amis, and Collins (1983) found them in Central MP. After the present paper was given, I found evidence for topic-marker *o* in Proto Oceanic, which may be given in a future paper.

2.2.2 Oceanic PCMs *i*, old Case 1

This is the Case 1 marker for personal proper names in Atayal, where Tagalog and many Formosan languages have *si*. Tagalog (Schachter & Otanes 1972:88) shows it in the Case 1 2SG *ikaw* 'thou', from **i* + **kaSu*.

For Lau, Solomon Islands, Fox's (1974) dozen definitions of PCM *i* include one that is nominative Case 1: "9. used before pronouns: *i gia* 'we', *i nau* 'I'".

The marker *ia* (from *i* plus article) in Tokelau is the most likely example I have seen of this in Oceanic. The Tokelau dictionary (Anon. 1986) lists six uses:

1. Before a personal name which is not preceded by a preposition, except the preposition *mai* 'from'...
2. Sometimes used before pronouns which are not preceded by a preposition and which do not immediately follow the verb...
3. Before locative nouns and place names which are not preceded by a preposition...
4. Before nouns referring to people who are acting collectively...
5. Before nouns referring to violent weather phenomena or to objects which occur in profusion...
6. Before a noun which is the subject of a number predicate.

2.2.3 Oceanic PCMs *a*, old Case 1

Atayal Formosan uses this marker for nonspecific common nouns. Zorc (pers. comm.) rightly analyses the Tagalog common noun Case 1 marker *ang* as *a* + 'linker' *ng*.

No example was found in Oceanic. The *a* which occurs as a general article or a personal article in Oceanic languages seems to be a grammaticalisation (and possibly lenition) from demonstrative *a* or *ia*, not a reanalysis of an old Case 1 marker.

2.2.4 Oceanic PCMs *u*, old Case 3

The non-Oceanic use is shown by Donohue (1995), in a study of *Tukang Besi* on Sulawesi, giving examples of *u* labelled genitive, with varying semantic roles. Rather than create a new category for zero casemarking of (genitive) Case 2, we'll assume that this is an ancestrally locative Case 3 that has invaded genitive territory, as often happens. The following example has kept spatial semantics:

- (2) *te po'o l-tompa-api-su u La Mar*
 CORE mango OBJ-throw-DIR-1SG.POSS GEN PN
 'the mango that I threw over to *La Mark*'

In the Oceanic language of *Anejom* (*Aneityum*), the southernmost island in Vanuatu, "the basic locative prepositions are *a* and *u*, and a large number of locative phrases...are introduced by one or other of these two prepositions" (Lynch 1982:127). An example:

- (3) *Et ehes aen u incai.*
 3SG:AOR come.from she LOCtree
 She is coming from the tree.

Kwamera, Vanuatu, has a demonstrative 'this' or 'here', *u*, which may be PAN preposition *u* + demonstrative (lenited). If so, that PCM is an early doublet of *Kwamera i, ia* 'it, to, in, on, from'.

In Yap, probably an Oceanic language, the preposition *u* is glossed 'at, from, on, in', and is the left preposition in the 'on top of' construction (Jensen 1977:54, 167, 238).

2.2.5 Oceanic PCMs *i*, old Case 3

These are too common to need comment. I am not the first to note that locative is the only semantic function that can be reconstructed with certainty for preposition *i* in POc. It acquired genitive uses, too. In Tuvalu (my fieldwork) embedded prepositional phrases such as 'on top of' are *i* + locative noun + *i*, in this case, *i lunga i*. One can also say *ki lunga i* for 'to the top of', or *mai lunga i* for 'from the top of'. Kennedy's *ki lunga ki* (1945:9) was never used in any Tuvalu island but Vaitupu and is no longer used there. Finney and Alexander (1998:30) found it in Rapanui and in Maori. Question of *qi*. The suggested presence of *qi* as a PCM in Proto Oceanic (Hooper 1985) is not supported by any **qi* in non-Oceanic protolanguages. All examples suggested as reflexes of POc **qi* are better accounted for as *i* or *ki*. Only two Oceanic languages were cited in support of a ***qi* reconstruction, and both were misconstrued. Tongan may seem to have three similar PCMs, *i*, *'i*, and *ki*, which could support Proto Polynesian and POc *i*, *qi*, and *ki* respectively. But Churchward's dictionary (1959) makes clear that the first two are alternate forms of the same word, without and with a glottal stop, respectively. The parsimonious view is that the initial glottal is a prosodic one that some speakers have reanalysed as phonemic. As for *Kwara'ae* (Deck 1933), it has no phonetic *ki*, but has *i* < POc *i*, and *'i* < POc *ki*, both being the regular reflexes for that language. It is time to abandon the myth of POc *qi*. The author of the *qi* paper, Robin Hooper, states (pers. comm.) that in writing the paper she was concerned mainly with other matters and only peripherally with the initial consonant, in which she has no investment. The *q* designation was decided by one of her professors.

2.2.6 Oceanic PCMs a, old Case 3

Just as with initial consonants, prepositions show variation of vowels, especially between *-i* and *-a*, and it may be that the locative *i* (initial zero) can have a variant *a*.

Tolo (Crowley 1986) shows a preposition *a* 'of':

- (4)a. *gare a tataru*
 man of healing
 'man of healing' (a traditional doctor)
- b. *kabikabi a kolo*
 bank of river
 'bank of river'

Crowley regards it as a shortened form of *na*. But it's found in other languages where such origin is even more implausible.

For Anejom, the language of the southernmost island of Vanuatu, Lynch (1982) says, "the basic locative prepositions are *a* and *u*", and gives this example of *a*:

- (5) *Et ehes aen a nauritai.*
 3SG:AOR come:from she LOCgarden
 'She is coming from the garden.'

Lynch is puzzled by the "subtle" distinction between 'garden', which requires *a*, and 'tree' in sentence (3), which requires *u*.

For Hawai'ian, Puku'i and Elbert (1957:1) list:

- (6)a. *'ai a puaqa*
 eat PCM pig
 'eat like a pig'
- b. *kahe a wai*
 flow PCM water
 'flow like water'

Samoan (Milner 1966) shows:

- (7)a. *Sau a fuifui lupe.*
 come PCM cluster pigeon
 'Pigeons come in flocks.'
- b. *nu'u a uta*
 village PCM inland
 'inland village'

2.3 Oceanic PCMs in s-

Zorc (pers. comm.) hypothesises that Proto Central Philippine had all three *s-* forms: *su* as definite, usually Case 1, occasionally Case 3; *sa* as neutral or definite Case 3; and *si* as indefinite Case 3.

2.3.1 Oceanic PCMs *su*, old Case 3

In Formosa, Paiwan has **su-* > *tu-* (+ *a*) as casemarker for [Case 3] 'neither in Focus nor Agent' (Ferrell 1981:285).

In MP outside Oceanic, Case 3 *su* is found in Ata Manobo, southern Philippines (Hartung 1975:36). In the Talaud and Sangir Islands, Stokhof (1982b:41, 59, 220, 244, 283), *su* occurs (glossed 'at, in, on') in many dialects, including Taghulandang, Beo, Enemawira, Taruna, Tahuna, Tamako, Beran Manganitu, Tambo, Tabuti, Sawang, Siau. It is also found in languages in Seram (Samasuru-Paulohij, Elpaputih), glossed 'at' (Stokhof 1981:93, 115, 138, 155).

In North Sulawesi, where the languages are mostly of Philippine type, several languages show PCM *su*, with glosses mostly 'at, in, on', occasionally also 'from'. Languages include Tompakewa, Ratahan, Bantik. Another dialect of Tompakewa has *si*. Other examples of *su* are in Ratahan and Bantik (Stokhof 1983:281, 295).

Despite all this, I know of no example in Oceanic.

2.3.2 Oceanic PCMs *si*, old Case 3

Reid (1974) reported *si* in 'oblique' (Case 3) in the Central Cordilleran languages of the Philippines. Stokhof (1982b:76, 90, 105, 134, 162, 185, 268) also found it as 'on, at, in' in eight languages on Talaud and Sangir islands. But evidence for its occurrence in Oceanic is very slight.

Arosi *si* 'belonging to, of', has been mentioned above. Arosi *sia(na)* 'at the house of, in the presence of, with (like French *chez*)' (Fox 1978), is the same with the demonstrative suffix mentioned above. In view of the absence of Case 3 *si* elsewhere in Oceanic, and the possibility that some or all of Arosi *si* < **ti* (discussed in §2.5.2), we can have no confidence that POc had this *si* PCM.

2.3.3 Oceanic PCMs *sa*, old Case 3

As *sa* is such an important and basic preposition and casemarker in the Philippine languages, it is curious that nobody has looked for it in the Oceanic languages. It is possible that this PCM began with only the *a* vowel, and that the oblique *su* and *si* forms found in Western MP arose by analogy with the three-vowel paradigm found with other initials.

For Tagalog, Schachter and Otones (1972) show the *sa* case as one of the three cases, calling it the 'directional complement'. Its central and probably oldest use is 'to, toward', but its uses cover a wide field of dative, allative, locative, instrumental, and miscellaneous oblique functions.

In Bikol, one of the Philippine languages in which it became a casemarking prefix to pronouns, it kept its *a* as well as the (arguably) pronominal *i* as shown in Mintz's (1971) entries:

- saiya* 'his; him; her; to, from, by him (it, if animate)'
sainda 'they; them; to, from, by them'

Oceanic has dethroned *sa* from its key position, mainly by encroachment of the five *-i* PCMs. The form *sa* survives only in niches here and there.

Tolo (Solomon Islands):

Tolo (Crowley 1986) has two *sa* prepositions: *sa-na* 'with, from, of, belonging to':

- (8) *A baka pepetsi i sa-na ki Maria.*
 the child little at with ART Maria
 'The small child is with Maria.'³

and *sa-nia* 'at, from, of':

- (9) *Hira baka ra tsolo sani-u.*
 the-DEF-PL child they laugh at.me
 'The children are laughing at me.'

The *n*- elements on the ends of the prepositions are old object pronouns, not possessives, and do not mean that *sa* is an old noun. They resemble Chen's "DEM" (1987:127).

Kwamera (Vanuatu):

Here, *sa-* is defined (Lindstrom 1986:122) as "marker of benefactive":

- (10) *O sa-i kaha.*
 do for-POSTCLITIC grandparent
 'Do it for grandmother.'

Tinrin (New Caledonia):

For this language, which is about the same as Grace's Grand Couli, Osumi (1995:132) says: "*-sâ* 'at, about' is suffixed to only two intransitive verbs, *a* and *îgâ*":

- a-sâ* 'laugh at'
îgâ-sâ 'dream about'

Nguna (Vanuatu):

The basic transitive clause, 3SG, in Nguna, is (Schütz 1969b:54, 207):

- (11) *E soli a.*
 he bound it
 'He bound it.'

with element 3, inner nominative *e*, and element 5, inner accusative *a*.

With one verb, the 3SG object pronoun is *na*, ancestrally from **na + a*, or **ni + a*, old Case 2; and with some verbs it is *sa*, from **sa + a*, old Case 3. Those forms reflect the fact that in agent-focus in contemporary Tagalog and Wulai Atayal, and likely in PMP and PAn, either Case 2 or 3 can represent what can be considered semantically as (accusative-like) objects (patients, undergoers). For Tagalog (Schachter & Otanes 1972:78) the object is (*nang*) Case 2 in 'the child washed a plate' but is in (*sa*) Case 3 in 'the young man loves the young woman' and 'the child helped the woman'. For Wulai (Rau 1992:143-144) the 'direct object' of a common noun is in 'genitive' Case 2 (He bought a rope), while for a pronoun the 'direct object' is usually in 'dative-locative' Case 3 especially 'if it can be viewed as referring to a location', examples 'My mother talked to me', 'I did not utter a word', 'when he saw the woman'. So it is striking that despite the undeniable change from ergative to accusative syntax, the Vanuatu Oceanic language of Nguna shows clear relics of the representation of

³ POc initial **k > h*, and initial **t > k*. The particle *ki < *ti* is honorific before female names.

accusative-like objects seen in agent focus in Atayalic (Formosan) and in Tagalog (Western MP) languages. The absence of an unequivocal accusative marker in those languages is a strong reason for classifying the languages as of ergative type, in which sentences of this kind are intransitive.

At any rate, Nguna is interesting as possibly the only Oceanic language in which *sa* follows the example of other PCMs in coalescing with a pronoun to its right, thereby constituting a left-sided case inflection (though it does that in at least one Philippine language, Bikol, and to a lesser extent, Pangasinan). Thereby, Nguna is the only Oceanic language in which *sa* occurs in ways that are more likely to be called 'casemarker' than 'preposition'.

Nguna is also the only language in which *sa* occurs in two forms: simple *sa* and *asa* (though Chamorro has it as *as*). In its *asa* form this casemarked pronoun is called Ablative Case by Schütz (1969b:39): "the ablative indicates the place from, of, or in which. The paradigm is almost identical to that for object." Indeed, his table of pronouns forms shows that for three of the six person-number slots the forms are identical; for the other three, including *sa*, the ablative differs only in having the syllable *a* prefixed; and in the 3SG pronoun, while, for the ablative, the (*a*)*sa* form is the only one, the inner accusative object has four forms, *sa*, *na*, *a*, and *e*.

When I first noticed that set of four forms, it puzzled me. Only much later did it dawn on me that the *sa* and *na* are ancient markers for the old Cases 3 and 2, respectively, each of which marks accusative-like objects in some non-Oceanic AN languages, as we have noted here. What Schütz calls Ablative Case functions much as Tagalog's *sa* case and Wulai's Case 3 called Dative (Rau 1992:144) or Locative (Huang 1993:17). Here are examples from Schütz (1969b), with page and line numbers:

- (12)a. *E too pae asa.*
 it TAM come from.it
 'It came from it.' (16:19)
- b. *E paae asa mari-tiṗa e.*
 he begin it against him
 'He turned on him.' (20:61)

and from Schütz (1969a:39):

- (13)a. *E one asa one.*
 it lie (on).him lie
 'It's required of him.'
- b. *A noa ki sua e asa.*
 I tell OBJ TAM him of.it
 'I already told him about it.'⁴

When the oblique *asa* pronoun is to be replaced or supplemented by a noun, the PCM for the noun is not **asa* but *ki*. For example, Schütz (1969a:76) gives a basic sentence using pronouns:

- (14) *Eu soso e asa.*
 they call it that
 'they call it that.'

⁴ Or *ki* is 'to', in which case, the translation is 'I told it to him.'

but when the pronouns are replaced by nouns, it comes out:

- (15) *Eu soso na-wora waia ki m̄alapāoa.*
 they call place this OBJ Malapoa.
 'they called this place Malapoa.'

Rotuma:

In Rotuma (Churchward 1940), **sa* appears as *se*, which is phonologically consistent with the fact that the POC adverb *sake* 'upward' appears as *se'e*. Churchward (1940:31, 32) defines *se* as 'to; for' and comments:

the chief non-possessive preps. are 'e, se, and ma, meaning (fundamentally) at, to, and with...Principal senses of se: (a) to (also towards...); on to, into, up to, as far as; until. (b) according to, to the extent of...(c) for.

He also mentions it in 'look AFTER', 'think ABOUT', 'lean AGAINST'; and as the first preposition in *se rer ne* 'to the top of', which is *ki lunga i* in Tuvalu Polynesian. An example of a *se* phrase where English uses a direct object is:

- (16) *Gou fesia' se irisa.*
 I hate PCM them
 'I hate them.'

2.3.4 Oceanic PCMs *su*, old Case 1

Reid (1978) reconstructed **su* as nominative casemarker for a protolanguage ancestral to Philippine languages he studied. Chen (1987:52) gives McKaughan's (1962) example of Case 1 *so* < *su* in Maranao, a Philippine language.

Collins (1983), considered Reid's **su* as a reasonable source for *u* markers in Seram, but PAN **u* is more plausible. Pangasinan has *so* (< **su*) 'particle marking topic of equational sentence and subject of verbal sentence usually when these are 'general' and non-personal in character' (Benton 1971).

I know of no example of nominative *su* in Oceanic.

2.3.5 Oceanic PCMs *si*, old Case 1

This particle clearly goes back to PAN, and very early became a Case 1 marker for proper names of persons and, perhaps later, for third person pronouns referring to persons. Ross (pers. comm.) finds evidence that it began as an honorific particle placed after the PCM, before the name.

For Oceanic, Ross (1988:240-247) finds *si* a general topic marker in Western Melanesian (WMN), but as used in Roviana for final topic accusative marker ('pragmatic pivot') it aligned undergoer with intransitive subject as absolutive, and so made Roviana an ergative language (with *si* as absolutive casemarkers) as opposed to its close kin Maringe.

2.3.6 Oceanic PCMs *sa*, old Case 1

I know of no example of nominative *sa* in Oceanic. Nor is there strong reason to think it existed in PMP. The initial Case 1 *s*- may never have had the full set of three vowel alternatives.

2.4 Oceanic PCMs in *k*-

2.4.1 Oceanic PCMs *ku*, old Case 3

Chen (1987:52) gives McKaughan's (1962) example of Case 3 locative *ko* < *ku* in Maranao Philippine.

Wolio, a WMP language of Southeast Sulawesi (Anceaux 1987), shows *ko* < **ku* or **ku-a* as comitative preposition 'with, and'; so we have direct evidence of *u* forms for the *k*-initial both in the unmarked case (old Case 1) and in the oblique (old Case 3).

Yap is probably an Oceanic language. One of its four prepositions discussed by Jensen (1977:54, 167, 235-236, 238) is *ko/ku*. It is spoken and written *ku* in certain contexts and is surely from **ku*, although in other contexts it is spoken and written *ko*. It is glossed 'for'; also 'in', 'from'. It appears as the right (genitive) preposition in the 'on top of' construction.

Also in Oceanic, a Micronesian language, Marshallese (Abo et al. 1976), has differentiated *kon* 'for, because, with, concerning', possibly from **ku*.

2.4.2 Oceanic PCMs *ki*, old Case 3

These are clearly PAn, as they are common throughout many branches of AN, including Oceanic. In Mayrinax Atayal (Huang 1994:109) *ki* is comitative and allative. In Bunun (a language that has been described in both focus and accusative terms) Starosta (1974:316) calls *ki* 'accusative' without giving an example. It is also an accusative marker in Tanan Rukai (Starosta (1974:319): *ki* for personal and *ka* for impersonal (the former a true Case 3 but the latter agreeing with nominative). Some Philippine languages have *ki* as Case 3 marker for personal names, though *kani*, *kay* and *kang* also occur. In Deli-Malay Sumatra Indonesian, Tampubolon (1983) reports *ke* allative 'to, onto, into', in contrast to *di* locative 'on, in, at'; this may be a PAn distinction.

The Tolo Oceanic *k*- preposition [*h*- by regular sound change] (Crowley 1986) is expanded by suffixing demonstratives, as follows: *hinana* 'prep. for, of, belonging to' (+ noun) *hinia* 'prep. 1. with. 2. about, of, concerning.'

In Kwara'ae (by regular phonological change, '*k*' is a glottal, written with an apostrophe), interestingly, the POc **ki* reflex has genitive meaning 'of', sharing that field with *ni*. The subtle difference is shown in examples (Deck 1933):

ni in: 'a bill of divorcement'

i < *ki* in: 'the sound of wailing'

For Nguna in Central Vanuatu, Schütz (1969a:41) says, '*Ki* and *ni* are both translated as 'of', but their difference in meaning is similar to that of O- and A- particles in many Polynesian languages' [inalienable and alienable possession, respectively].

Schütz seems to distinguish at least two *ki* particles: when it links noun with noun, and can be glossed 'of', like a genitive, he calls it a preposition; but in a verb phrase he seems to

Fiji (Capell 1968) has *ki* 'to, toward'; *kei* 'with, and'. That's the same combination of allative and comitative usage that was found in Mayrinax Atayal. Such close agreement between languages in different primary branches of AN (and too far apart geographically to posit borrowing) is striking. It is highly convincing for attribution to PAN.

Rotuma (where **k* > glottal): 'e is "at, on, in, with (instrumental), from, than, etc." (Churchward 1940).

All Polynesian languages have **ki* (with any applicable phonological change, *k* to glottal). It is indistinguishable from *i* in Hawai'i. Nearly all have allative meaning 'to'; many have dative, benefactive, direct object, and other functions. For instance: West Futuna (Dougherty 1983:324) has *ki* oblique, dative object, 'to, toward', while Nukuoro (Carroll 1973:88) has *ki* (spelt 'gi') glossed: 'toward', 'to', 'in order to'; desiderative aspect (< *kia*).

Kosrae (Lee 1975, 1976) has *nu ke* 'to'; but simple *ke* 'from, at/about (place), instrument'; *ke* [its object is always non-human] 'at' (place), 'on', 'about' or 'at' (time, field of knowledge, topic of speaking); 'from', 'by means of', 'because of' (material, inanimate cause, instrument); *kac* 'at', 'about', 'for' (it or them) [this word, in Lee's dictionary (1976), is not in Lee's grammar (1975)]. Note that in Kosrae the digraph 'ac' is simply an open *e*, and 'c' is not a consonant; *nuh ke* 'to, till, up to (a time or place), for (a purpose)'; *liki* 'from, than'. (It is not clear whether this is from POc **ri* + **ki*, or from the word coined in POc **l* that is not ancestral.)

2.4.3 Oceanic PCMs *ka*, old Case 3

Several of Starosta's (1974) Formosan languages have accusative '*ka*' in common with the nominative, so there it may be an extension of the Case 1 use, not an independent Case 3 PCM.

Outside Oceanic, Stokhof (1987:185) shows *ka* as 'at, in' in Mentawai, an island off the west coast of Sumatra.

Note that some Philippine languages have Case 3 PCMs of form *kani* and *kay*, which could possibly arise from *ka* + *ni/i*.

In Oceanic, a Micronesian language, Marshallese, has differentiated *kon* 'for, because, with, concerning', and *nan*, 'to' (Abo et al. 1976).

2.4.4 Oceanic PCMs *ku* > *ko*, old Case 1

The *k*- PCMs, mainly *ka* and *ku/ko*, predominate in Formosan languages as the Case 1 ('nominative' or topic) markers.

In Polynesian languages, *ko* is a standard casemarker (e.g. Churchward 1959, who calls it a preposition), often called 'presentive'. 'Predicate nominative' may be a good term for some of its common uses. In Fijian it is said to have become an article for proper names (Capell 1968) though I think it keeps signs of its ancestral role.

Here is the PCM *ko*, marking predicate nominative in Tuvalu Polynesian (my fieldwork):

- (17) *Koe ko te fai-ako-nga.*
 thou *KU* the teacher
 'You are the teacher.'

Compare a sentence (Rau 1992:187) in Wulai Atayal (where **ku* becomes *qu*):

Here is the PCM *ko*, marking predicate nominative in Tuvalu Polynesian (my fieldwork):

- (17) *Koe ko te fai-ako-nga.*
 thou *KU* the teacher
 'You are the teacher.'

Compare a sentence (Rau 1992:187) in Wulai Atayal (where **ku* becomes *qu*):

- (18) *Qani qu' puqing n-qu' ngasaN maku.*
 this *KU* origin of-DEF home my
 'This is my home town.'

This illustrates the fact that *ku* (or perhaps any marker of topic) implied being specific and definite in PAN, and in Atayal it becomes usable as a marker of specificity or definiteness (put right of another PCM) even when it is not in topic or nominative Case. I think that's the sequence. The alternate hypothesis could be explored that *ku* was a definite article first and later came to serve as topic marker and nominative marker.

In Kapingamarangi Polynesian, where 'g' is [k] and 'd' is [t], Lieber and Dikepa's dictionary (1974:xliii, 51, 287) supports the concept of predicate nominative by defining *go* (< **ku*) 'it is, it was'. One of their examples is:

- (19) *Go au ne hai di maa.*
 it.was[*KU*] I TAM do the thing
 'It was I that did it.'

Note the article '*ti*'. There is a common belief that this article in Polynesian and Micronesian languages is only '*te*', but in fact, '*ti*' and '*ta*' are also scattered widely.

2.4.5 Oceanic PCMs *ki*, old Case 1

No unequivocal example was found in Oceanic, although the Kwaio and Fijian examples given in §2.4.6 may well belong here.

2.4.6 Oceanic PCMs *ka*, old Case 1

In Formosan languages, *ka* is perhaps the commonest marker of Case 1 (nominative). Examples are in Starosta (1974).

An interesting fact, not noticed before, is the *k*- Case 1 marking found in Oceanic Kwaio by Keesing (1985:28-29). The inner nominative pronoun 3SG, which he calls SRP, has two forms in free variation: *e* < **ia*, as in Standard Fijian; and *ka*, which may come from old Case 1 PCM **k(a, u, i)* + *ia*, though I incline now toward construing it as PCM **ki* + PAN demonstrative *a*. In confirmation of either hypothesis, Geraghty (1983:302) reports pronoun 3SG *kia* in some Fijian communalects.

2.5 Oceanic PCMs in *t*-

MP languages have a plethora of monosyllabic *t*- forms. Not all these are PCMs. Some are PAN demonstratives in **t*- and **c*-. Others might possibly be old locational nouns. In the section that follows, we'll mention some candidates that are to be rejected.

Are there any *t*- PCMs in Case 1? Fijian *tia*, which we have cited, is a rare example. Polynesian and Micronesian languages have an article that is usually *te* but also *ti* and *ta*. I had viewed it (1997) as lenitions of *tia*, but incline now toward viewing it as a set of simple PCMs, mostly nominative case, cognate with PCMs attested in Formosan languages both as *tV* and as *cV*.

2.5.1 Oceanic PCMs *tu*, old Case 3

PAn had a demonstrative **cu*, which was **tu* in PMP, and less often appears with vowel *a* or *i*. Occasionally it is hard to distinguish a Determiner (Casemarker, ancestrally a preposition) from a demonstrative determiner or article of demonstrative pronoun ancestry).

Tsou Formosan *to*, accusative marker (Starosta 1974:349) must be PAn **tu*. But Li's (1995) **cu*, accusative marker in Mayrinax Atayal must be PAn **cu*. By regular phonological change, these two PAn forms merge in accusative marker to **tu* in Amis (Chen 1987:136-137) and PMP.

In MP outside Oceanic, in Ata Manobo, in the south Philippines, Hartung (1975:34-37, 47, 51) shows *to* as a preposition glossed 'in, at, to, from, of'. An example:

- (20) *Wa dod bag tunas to kamot ta.*
 not yet quite leafage in field our
 'There aren't quite yet any sprouting leaves in our field.'

Stokhof (1987:131) has *to* 'at, in, on, from' for Lirung in the Talaud and Sangir Islands area. Stokhof (1987:131, 149) has it as *cho* ('at, in, on') in Nias, an island off the west coast of Sumatra. Borneo shows *tu-matan* 'from' (Stokhof 1986:30).

Standard Toba-Batak, described by Sarumpaet (1986:82-83), has *tu*, glossed 'to'.

In Oceanic, Grace (1976) in Grand Couli, New Caledonia, records *tu* 'in, at, of'.

Kwamera is a language in the South-east of Tanna island in Vanuatu. A *t*- preposition occurs with alternate forms *tu* and *ti*, the latter a high central vowel. Lindstrom (1986) defines it: "1. dative preposition: *to*; *ti nipran* (I give it) to the women; *ti si?* to whom? for whom? 2. purposive or causative preposition;...*ramen ti nife?* what is he going for? 3. prefix to some temporal nouns expressing future;...*ti nipin* then (in the future);...4. marker of benefactive; ...*ti tata* for father;...6. prefix of address with calling out to people; *ti mama!* mama!" Definition 6 recalls the arguably non-oblique uses of *t*- forms noted in Ilokano and Tukang Besi.

Many WMP languages have a demonstrative pronoun *to* < **tu*. Sometimes it occurs with an *i*- prefix (fossilised Case 1 marker) and the complex resembles a casemarker.

2.5.2 Oceanic PCMs *ti*, old Case 3

For *t*-, more than other initials, it is unclear what the syntactic role was in the earliest period, and the semantic function is even less clear, although it seems to fall more often among the Case 3 markers of allative/locative/temporal and accusative functions.

In texts scanned, *t*- PCMs appear to be used to mark direct objects, subjects and locatives (or allatives) in Seediq (Atayalic), Tsou, and Amis and Bunun (all Starosta 1974). One of the examples seen in Wulai Atayalic was allative (Egerod 1966:362 in Huang 1993:56) as follows.

- (21) *M-usaH-sakuH te ngasan.*
 M-go.IS.BN PCM house
 'I go (in the direction of, toward) home.'

MP languages outside of Oceanic that show *ti* or *te* include Ilokano, Manobo, and some of Stokhof's Indonesian languages. 'Home' is a fairly common object.

First let's examine some MP particles that are doubtful candidates.

Note that Ilokano *i-ti* (Constantino 1971:224) (glossed: 'as for, concerning') occurs typically to mark a noun that is fronted as a topic (two occurrences of *ti*):

- (22) *I-ti lalaki, napigpiga ngem ti babai.*
 PCM?.[as.for] man strong than PCM? woman
 'As for a man, he is stronger than a woman.'

This Ilokano use of (*i*)*ti* resembles the use of *te* in Donohue's (1995) *Tukang Besi*, WMP, where *te* can mark any noun emphasised by fronting (topic) as well as others of 'core' complement (not adjunct) role, generally with semantic functions agent, dative, theme-patient, or instrument.

In the Ilokano uses shown here, however, it is not clear whether it is the ancestral *t*-PCM or *t*-demonstrative.

One gloss of (*i*-)*ti* (also *ta*) in Ilokano is 'because of, on account of, due to, in'. The *i* + *ti* marker, which may be PAn, serves as a variant of *ti* in Ilokano but a variant of *i* in Amis.

- (23) *Iti rurod na, kayat no nga tiritiren ti tengnged ko.*
 from anger his wish CONJ ? twist the neck my
 'In his irritation, he wanted to twist my neck.' (again two uses in one sentence)

The parsimonious view seems to be that Ilokano's *ti* is a determiner/demonstrative, and the PCM is the *i* syllable left of it.

The closest resemblance to Atayal's allative *te* is in Seram (Central Moluccas) seen in Stokhof (1982a:20, 28, 29, 38). It is an illative, 'into'.

Manobo: In this Philippine language, *te* is not listed as an entry in the dictionary but is shown thrice (Elkins 1968:88) in defining another word, *himan* 'an item used by someone for any purpose'.

- (24) *himan te me'ama*
 thing of a.man
 'man's clothes'

The other two examples were 'carpenter's tool' and 'part of a house'.

Glosses that seem to be suggested for *te* include: 'of, pertaining to, used by, belonging to, located with, associated with'. It may well have arisen as a locative and become a genitive. Muna, a language of Sulawesi, has *te* 'in, on'. (Stokhoff 1985:175). In Seumalur, a language of the islands off the west coast of Sumatra, *teh* means 'from' (Stokhof 1987:101) In Lekon (Stokhof 1987:41) it means 'from' and 'in'. Two other languages in the area (Stokhof 1987:131, 149) have *cho* apparently from the more archaic *tu* form of this preposition. In Banggai, a language of Sulawesi, *tia* means 'at' in contrast to *na* 'from' (Stokhof 1985:262).

With that background, we search in Oceanic.

For Loni (in the Admiralty Islands, Papua New Guinea) Hamel (1994) finds *ti* as an emphatic particle. It may precede a noun, as if a casemarker, but can also precede the verb or be in clause initial position. An example (1994:93) is:

- (25) *Suwe iy ti cohonan mah iy ti cohoman.*
yam 3SG EMPH place.3SG taro 3SG EMPH place.3SG
'Yams have their place, taro has its place.'

As Arosi (Fox 1978) has only two words in *ti*, one of which is onomatopoeic (squeak, of a mouse), its preposition *si* may represent ancestral **ti* as well as (instead of?) **si*.

Mota (Vanuatu) has *ti* as instrumental 'with':

- (26) *Iloke o kere ni me vusi-a ti nia.*
this the club he PAST strike-him with that
'This is the club he has struck him with.'

Nakanai forms are quoted by Durie (1988) from Johnston's dissertation (1978) as follows:

- (27)a. *E masta vi-valiburi-a la pepa lo-ata te balus.*
the white.man cause-scatter-3SG the paper come-down LOC plane
'The white man scattered papers from a plane.'
- b. *Egite ge go-muli te Kansel.*
they IRR motion-from.me.East LOC councillor
'They are going east to see the councillor.'

The examples show that the locative preposition-casemarker *te* is a very general locative ('to' in one example, 'from' in another), with the specific meaning supplied by the verb and by a suffix on the verb. This construction in Nakanai is used only for movable things and animates such as persons.

Grace (1976) in Grand Couli, New Caledonia, records *tê* 'near, adjacent to, at the home of'. Osumi (1995:163) shows:

- (28) *wake tê-patrik*
job home-Patrick
'job at Patrick's'

The Kwamera *ti*, *tu*, has been discussed under *tu*. Notice also Kwamera demonstrative *te* showing the *-ee*, *-e* lenition series as in Polynesian *tee-nei*. Lindstrom (1986) analyses demonstrative *te* as *ti* + *i*.

2.5.3 Oceanic PCMs *ta*, old Case 3

The PCM **ta* is reported in Starosta (1974:349) as a Dative-Accusative casemarker in the Formosan language Tsou. The language also has it as nominative, and also has accusative *nca* from **ca*. It also has *to* < **tu* as accusative and *co* < **cu* as nominative; that's more than we need. Bunun has accusative *ta* but as a suffix. It looks like the *-a* form of the Case 3 *t-* marker which also appears as *tu*, *te*, and *ti*.

Atayal (Li 1995) has a Case 3 marker which is *sa*, *sa-qu* in Wulai dialect and *c-ku* in Mayrinax (also Mayrinax *ca*; Huang 1994:109) and has been attributed to PAn **ca*, which would be *ta* in MP. More curiously, Li (1995:47) uses the Mayrinax Case 3 marker *ca* even though he fails to mention it as such, fails to gloss it, and fails to list it among the casemarkers or prepositions:

- (29) *Kac-un cu' na' xuil ca' tunux.*
 bite-PF I GEN dog head
 'I was bitten by a dog on the head.'⁵

For POc, Pawley (1973) wrote, “**ta* is reconstructible as a preposition indicating locative and perhaps possessive relation.”

Ross (1988) noted Pawley's reconstruction of POc preposition *ta*, but preferred to analyse it as a locative noun, because in some languages it takes possessive pronoun suffixes. They both may be right but speaking of different words. There may be two *ta* 'prepositions' of different origin.

Pawley's is the possible PAn **ta*. In Mosel's detailed study of Tolai (the language cited in Pawley 1973) it seems that this *ta* is identical in use with traditional Case 3 locative prepositions, such as *di* in Indonesian and Malayan. And for Loniu in the Admiralties, Hamel (1994: 97) gives an example of the preposition: *ta ku* 'in the pot'.

The other *ta*, the one that looks like a noun in taking possessive suffixes, may be from the demonstrative *t-* as seen in many Philippine languages. Can a demonstrative evolve into a locative noun? That's the reverse of the normal order of grammaticalisation. We note *ree-* 'at, in, with, for, to, upon, on' in Woleai (Sohn & Tawerilmang 1976) that is such a noun.

Mosel's (1984) work was a careful and detailed study of the syntax of Tolai, where there is a very strong appearance that *ta* is a pure preposition. What is striking is that the function of *ta* follows the basic pattern of *di* in Malayan or Indonesian, and the basic Case 3 prepositions in the non-Oceanic MP languages. In her table of prepositions for eight syntactic-semantic uses, Mosel (1884:171-172) lists *ta* in five of the categories (all but purpose, manner, and concern). For category 1, addressee-recipient-beneficiary, *ta* (glossed: 'to') is the only one. Likewise, in category 2, cause, *ta* (glossed: 'because of') is the only one. [That's the *ta* that is also 'because of' in Bikol, Ilokano, Isneg and Pangasinan.] For category 3, instrument, *ta* shares the area with *ma*. For category 6, time, *ta* shares the territory with three other prepositions. And for category 5, location, *ta* (glossed: 'in, at, to, from...') has six rivals for parts of the field:

- (30)a. *Nam ra tutana i gam vana ta ra marum.*
 DEM ART man he TAM go in ART night
 'The man went off during the night.'
- b. *To Kabiana i ga biti ta nina ra tutana.*
 NAME he TAM say to DEM ART man
 'Kabiana said to that man.'
- c. *I ve iau ta nam.*
 he inform me about that
 'He informed me about that.'
- d. *I ga maur ta ra mapinai.*
 he TAM be.satisfied by ART leaf
 'He became satisfied by leaves.'
- e. *Diat a ti varubu ta ra en.*
 they.PL TAM TAM fight because.of ART fish
 'they will fight because of the fish.'

⁵ Or 'in' or 'at' the head.

- f. *Dia ga ububu kana vudu ta ra labur.*
 they/PL TAM destroy his banana by ART wind
 'they (spirits) destroyed his bananas by wind.'

So it appears that Tolai has the 'all-purpose preposition' *ta*, much like Indonesian *di*. But Tolai has another *ta*, a demonstrative. Mosel's sentence quoted for *ma* also has *ta* as 'some'. It is the latter that seems cognate with Ross's (1988:104-105) examples of substantives *ta*, *ti*, *te*, locative nouns (not far from demonstrative pronouns) which take possessive (or object?) pronoun suffixes and move toward becoming prepositions. I suggest that these two *ta* forms, both found in Tolai, differ in their ancestry.

The preposition *ta* is thoroughly consistent with the *t*- prepositions/casemarkers found throughout AN, mostly with a different vowel. In contrast, the *ta* that is a demonstrative pronoun, and can become a quasi-prepositional locative noun, resembles the *t*-demonstratives found in Philippine languages, from PAN **c*-:

Isneg	<i>to</i> :	the, that
Bikol	<i>i-to</i> :	that, those
PamPangan	<i>i-ta</i> ':	that
Pangasinan	<i>si-ka-to</i> :	he, she, it (independent pronoun)
	<i>to-a</i> :	he, she, it (topic pronoun after <i>ag</i> 'only')

In Kosrae, Micronesia (Lee 1975:137-139), both POc **t* and **s* > *s* before *i* and *e*. Preposition *se* has a wide variety of functional roles: seller, speaker, observer, causer, possessor. When we consider that this phonology is oftener from **t*- than **s*-, and also that other Oceanic languages have prepositions from POc **te*/**ti* and seldom from **se*/**si*, it seems likely that Kosrae preposition *se* comes from a POc **t*- form. Its object is always human (in contrast to *ke*). It occurs both with and without a preceding preposition *nuh* (or *nwe*), which in Kosrae means 'to, till, up to, all the way to' (despite the 'from' meaning ancestral in the AN family) (Lee 1975:135-145, 1976). One contrast is:

- se* 'of ([object must be a person] possessor, seller, informer, observer, causer of emotions)
nuh se 'to or toward a person (receiver, buyer, benefacted, or simply end of movement)'

2.6 Oceanic PCM in *d*-

The *dV* particle is not among the most heavily used PCM. Nevertheless its occurrence is scattered broadly throughout the family, summarised as follows.

Li (1978:573) found *dV* as locative in the extinct Formosan language Pazeh. Starosta (1974:327) showed it in Saisiyat as (sleep) 'on the' (bed), though he failed to list it among the casemarkers. Zeitoun et al. (1996:67) for Nanwang Puyuma called *da* 'oblique'; and gave an example of it in a sentence glossed '...(drink) *da* (water)' [apparently accusative].

In non-Oceanic MP languages, including Bikol, Bisayan, Malay and Indonesian, *di* has locative and accusative-like casemarking semantics. In Malay and Indonesian it is the left preposition in embedded PP phrases of the 'on top of' type. Just as in English, 'on top of' has optionally grammaticalised to 'atop', so in Malay and Indonesian the left preposition *dV*- has come to meld with the locational noun, while the right preposition is reduced to zero. This irreversible process in which an old locational noun, by lenition and grammaticalisation,

is reanalysed as a preposition (or postposition in Mandarin today) is evidently a diachronic part of Universal Grammar.

In Oceanic languages, where $d > r$, both accusative-like and locative/allative uses of rV persist. For Arosi, Fox (1978) defines r as 'verb transitive suffix'. For Maori Polynesian, Williams and Williams (1956:14) defined preposition ra 'by way of, through, of direction'.

2.6.1 Oceanic PCMs $du > ru$, old Case 3

In Formosa, no du has been reported.

Non-Oceanic examples of ru are found in some WMP languages. For example, Fatakai (Nuauulu), a language of Seram in the Central Moluccas (Stokhof 1981:80) has $ru-ike$ 'at, on, till'.

In Yap, probably an Oceanic language, the $du > ru$ preposition appears as $roo-$ 'of', 'from', 'for'. Its object must be a suffixed possessive pronoun, and it is considered as replacing the preposition u in that context. See also §2.6.2 below.

In the Oceanic language Tinrin (Grand Couli) in New Caledonia, Osumi (1995:78-89, 165-167) shows ru 'at, in, on', as well as $drù$ 'on account of, because of', and $rugi$ 'at, on, about, locative, temporal and referential', made by adding the preposition gi 'at' ($< *ki$). There is also $nrô$, 'for (purposive, as in 'horse for children' and 'the day for his going')'. The phonology of this language is complex and its diachrony has not been addressed.

2.6.2 Oceanic PCMs $di > ri$, old Case 3

Li (1978:573, 576-578) reported di as 'the locative or directional marker' in the extinct Formosan language Pazeh. In various examples it was glossed 'in', 'at', 'to', and 'from'. Li took care to distinguish it from the homophonous demonstrative di .

Zorc and others have recognised di as one of the basic PCMs for Case 3 in Philippine languages. In Indonesian and Malayan it is the all-purpose preposition for space relation. It is found in many of Stokhof's lists of Indonesian languages. Sarumpaet (1986:82-83) glosses it as 'for'.

In Yap, probably an Oceanic language, the $du > ru$ preposition $roo-$ 'of', 'from', 'for' (already noted in §2.6.1) has a 'special impersonal form' riy 'of it', 'at it', 'from it'. The form may be from $*ru ia$, but $*ri(i)a$ is also plausible.

Arosi, as noted above in §2.6.1, use ri as a genitive 'of', and the same is true of Lau (Fox 1974).

Kii (Espiritu Santo, Vanuatu) has ri 'direction marker'.

For Grand Couli, New Caledonia, Grace (1976) shows re 'at, to'. For Tinrin, virtually the same dialect, Osumi (1995:165) shows $nrî$ 'in, with' (temporal and instrumental): 'life in those days', 'run with legs', while Kii (Espiritu Santo, Vanuatu) has ri 'direction marker'.

In Carolinian Micronesian two similar forms occur (Jackson & Marck 1991) that need to be distinguished: $lee-$ and $ree-$. The $lee-$ form is called a preposition, defined: 'at the place or time of'. Diachronically, its phonology fits either the $nî$ or the la/lo preposition. After the hyphen is a noun, such as 'farm', 'sea', or 'evening'. The $ree-$ form is called a relational noun [locative noun], defined: 'at, for, with, by, because of'. Diachronically it seems to be $*dia$, as in Indonesian, $< \text{PMP } *di-(i)a$. After the hyphen comes a severely reduced possessive pronoun, which may or may not be followed by a noun. This seems to be the demonstrative and third person pronoun, with bleached casemarking as in Indonesian, and in the Caroline

Islands assimilated to the set of locative nouns. In the example, I have had to supply the word-for-word gloss:

- (31) *Aa lo' ree-l imwa-l Juan.*
 he PAST.go at.that-of.him house-of.him John
 'He went to John's house.'

The *ree* is also a substantive, from the usual fusion of PCM with **iya* descendants, and so forms a left half of compound deictics.

The *ree-* morph also appears in Woleai (Sohn & Tawerilmang 1976), meaning 'at, in, with, for, to, upon, by, because of', considered to be a locative noun, though it seems to come down from **di + *(i)a*. In Ponape (Rehg 1979) it called a prepositional noun and defined 'location of (him, her, it)'. It is the most used of all the locational nouns in the languages, and the only one that appears to come from an *i* PCM + **(i)a*. The rest of them in Micronesian languages clearly arose as nouns, and the *l/n* ones in Micronesian languages have the same *lalo* ancestry as in Ross's Western Melanesian languages.

Woleai has a *re-* prefix to nationality. It may be a shortened form of *ree*; or it may be straight from POc **ri* with no history of coalescence with the demonstrative.

In Gilbertese (Tungaru) POc **r* is lost. So, if the *ri* preposition survives, it has been merged into *i* and is no longer distinguishable. Kosrae has *liki* 'from, than'. As **l* and **r* merge in that language, the morph *l* could come from PMP **d* or from the word coined in POc **l* that is not ancestral.

2.6.3 Oceanic PCMs *da > ra*, old Case 3

Outside Oceanic, a few *da* or *ra* forms occur in Philippine languages, as Case 1 or Case 3.

The *ra* form occurs in Polynesian: Maori (Williams & Williams 1956:14) shows *raa* 'by way of, through': *ko nga mo kaikai tukua ra uta*. [not translated].

Tuamotu (Stimson & Marshall 1964) has *ra(a)* 'for, belonging to (*syn naa*)', an example of a Case 3 form beginning to acquire Case 2 genitive use.

In Kapingamarangi, Lieber and Dipeka (1974:xliii, 100) define preposition *laa* (< **raa* < **daa*) 'toward, around by, -ward' and 'in or from the general direction of'. Example:

- (32) *Mee gu hana laa mngaaga.*
 he TAM go toward south
 'He went southward.'

In Nukuoro, Carroll (1973:251) shows at least two idioms with *laa* seeming to mean 'beyond, at the end of'.

2.7 Oceanic PCM in *n-*

As I have noted, the occurrence of this consonant, with all three vowels in PCMs in AN languages, is far better established than for any other consonant. This consonant also has a more clearly established syntactic-semantic function than any other; it was used as genitive (hanging noun from noun) and as ergative (marked agent, agent that is not focus or

nominative). Such words regularly descend from ablative 'from' prepositions, and some languages, including Maori, retain that as one of its uses.

2.7.1 *Oceanic PCMs nu, old Case 2*

Donohue (1995), in a study of *Tukang Besi* on Sulawesi, gives examples of *nu* labeled genitive, with various semantic roles.

Found in Chamorro and some Philippine and Indonesian languages, this particle has not been found, to my knowledge, in Oceanic. Of course, the less archaic forms of the *n*-particle (*ni* and *na*) are well known in Oceanic.

2.7.2 *Oceanic PCMs ni, old Case 2*

The best established PCM of all, *ni* is well attested in Formosan and Philippine languages, and its status outside Oceanic need not be reviewed here.

In Chamorro, where Topping and Dungca (1973:133-135) find *nu* and *i* merging to *nui* and then *ni*, the contemporary *nu*, *nui*, *ni* set may keep the ancient formation frozen in process, Topping is puzzled to find also *ni i*. That may reflect a reanalysis in which PAN PCM **i* plus demonstrative *a* is taken as a simple demonstrative *i(y)a* (fooling Dempwolf, as we have noted). In earlier work I followed Dempwolf.

Though *i/ni* alternation has been reported in two languages (*ni* after vowels and *i* after consonants) Hooper (1985) was right in rejecting any diachronic significance thereof. Both *i* and *ni* are very well reconstructed in PAN. Alternation in any language must be a recent development that could occur if the two prepositions came to have a broadly overlapping range of uses (as Fox (1978) reports they have in Arosi). The *ni* are too well known in Oceanic to need exemplification here.

In Yap the form is *nga* < **ni* + **ia* through the 'palatalisation' in POC described by Blust (1977). It is glossed 'to, for' (Jensen 1977:54, 167, 238).

In Polynesian *ni* is openly present in Nukuoro and Kapingamarangi, thinly disguised as *ni*- in West Futuna, and in most other Polynesian languages disguised by melding with possession classifiers *o* and *a* as *no*, *na*.

2.7.3 *Oceanic PCMs na, old Case 2*

Ross (1988:112) considers Oceanic preposition *na* to be from *ni* plus article *a*. But with *na* well attested in Formosan and Western MP languages, it must have been present in PAN and PMP; so it seems redundant to have it created anew in Oceanic.

As we have noticed, Polynesian also has possessive forms that are *na* from PCM *ni* + possession classifier *a*; and have corresponding *o* forms from the other classifier. These are not to be confused with the true ancestral *na* forms, which have no corresponding *no* forms.

The ancestral *na* forms in Oceanic are, in all or most cases, not genitive but agentive, the other main function of the Case 2 'genitives' in PAN. These are 'marked agent' (in somewhat different senses in Oceanic from those in Philippine and Formosan languages). In languages such as Hawai'ian, Maori, and Tuamotu, *na* puts greater emphasis on the subject than does the other agentive PCM, oblique *e*.

It is distressing to see that the greatest experts in Polynesian languages have failed to make the distinction between the two *na* words of different ancestry, and have treated the two as a single word. Williams and Williams (1956) define it in Maori as 'of, belonging to, by...'. Puku'i and Elbert (1957 and later editions) define it in Hawai'ian as 'by, for, belonging to (a form)'. Stimson and Marshall (1964) define it for Tuamotu as 'of, for, by,...by way of'. All regard it simply as the *a* form corresponding to *no*. All of them correctly include the gloss 'by' for *na* and not for *no*; but they fail to draw the conclusion that the *na* 'by' word is not the *na* word that has a corresponding *no* form.

2.8 Oceanic PCM, others

2.8.1 Comitative preposition *ma* 'with'

Briefly, we mention the POc preposition *ma*, with locative uses as well as meaning 'with' in the comitative sense. Like English 'with', after it became comitative, it also acquired instrumental uses. Here is one from Mosel's (1984:175) Tolai:

- (33) *Ma una tumu ra mata=na ma ta kabang.*
 and you.SG+TAM paint ART eye=his with some lime
 'And paint his eyes with lime.'

In Oceanic, as in Indo-European, locatives become comitatives and then are reanalysed into conjunction 'and' joining nouns. The locative that was *anti* in Greek and *ante* in Latin is *and* in English. Its old spatial meaning was 'over against, opposite'.

In Polynesian this has happened both with *ma* and with *ka*.

In a further step, the 'and' connecting nouns can become an 'and' connecting verbs or clauses. That also has happened both with *ka* and with *ma*.

For *ka*, in Tuvalu Polynesian (my fieldwork) a sentence or clause beginning 'And' will be (if a NP follows) *ka-ko* (presentive PCM 'ko'); or (if a verb follows) *ka-e* (neutral TAM *e*).

For *ma*, in Gilbertese (Tungaru Traditions, Grimble 1989:9) comitative *ma* as 'and' can also connect verbs:

- (34) *Bubunge ma bonotai.*
 begin and protect
 'Begin and protect me.'

2.8.2 The *l- prepositions of Oceanic

Ross (1988:286-287, 292) constructs for Proto New Ireland a locative preposition **la/*lo*, not found in Meso-Melanesian languages outside New Ireland. He derives it plausibly from the locative noun *lalo* 'inside'. (In Polynesian, *lalo* is 'bottomside' and *loto* 'inside'.)

Hamel (1994:268) finds that PCM in Loniū, in the eastern Admiralty Islands:

- (35) *Ime lo um.*
 3SG.come in house
 'He came into the house.'⁶

⁶ *Um* is a reflex of PAn **Rumah* 'house'.

As we have noted in the subsections of §2.6, some Micronesian languages have forms from *lalo* that need to be distinguished from forms deriving from the **d-* > **r-* PCMs. Note that in Carolinian, Woleai and Ulithi, but not the other Micronesian languages, ancestral **l* and **n* merge.

2.9 Possible Case 1 *d*

Both *t-* and *d-* > **r-* forms appear in Eastern Oceanic languages as neutral articles, as though coming from Case 1. I have spoken of this as 'bleached casemarking'. But perhaps there was Case 1 nominative ancestry. Evidence from Indonesian and from Reid's (1974) Central Cordilleran suggests the possibility of **d* as marker of Case 1. Malay/Indonesian has *dia* as a nominative third person singular pronoun 'he, she, it', more emphatic than *ia*. For the earliest Proto Central Cordilleran Reid reconstructs nominative singular **di* for general and '*di nan*' for specific.

3 Summary and conclusion

We have reviewed a number of prepositions or casemarkers which seem likely to have been present in Proto Oceanic, with emphasis on those whose phonology makes it plausible that they derive from Proto Malayo-Polynesian, and even PAn.

For *n-*, forms with all three vowels were clearly present in late PAn. The vowel depended on the classes of substantives governed by the PCM.

For some initial consonants and possibly for all, there is evidence suggesting that the ancient vowel was *u*, and that the *-i* and *-a* variants arose from addition of articles (or classifiers of nouns) on the right, and later deletion of the *u*. Certain attested languages have forms in *-ui* and *-ua* which, in this theory, are survivals of the intermediate stages of development.

Case 1 may have begun (as in Amis) as two cases: *k-* for the normal absolutive or nominative, and zero initial for predicate nouns and topics. Both may have had vowel variation, like *n*'s, from the beginning, with *u* the most ancient vowel. The *k-* probably began either as a topic marker or as a sign of specificity or referentiality, as topics are almost always specific. The ancient Case 1 marker with zero initial consonant may also have begun as a topic marker. If so, its progression to absolutive or nominative came later than that of *k-*.

For some initial consonants of PCMs, PAn may have had only vowel *-i*, and forms with the other vowels may have arisen by analogy with *n-* PCMs. The Case 3 locatives with initial consonants zero and *d-* are likely candidates for this course.

The *s-* initials probably began as two completely independent forms, an allative Case 3 with a vowel, and an honorific Case 1 with *i* vowel, the latter used only for proper names of persons.

Initial MP *t* (descending from both **t* and **c* in PAn) shows hints that its early uses may have been not only for locatives and allatives but also for accusative, for emphatic, and perhaps for nouns of time, especially past. And *ti* may have been honorific for females.

Polynesian, despite its phonological simplification and its swing from accusative to ergative syntax and back again, is a conservative language that keeps major portions of the PMP and even PAn system of prepositions and of casemarking.

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Part 2

Languages of Melanesia

4 *Sit, stand, lie: posture verbs and imperfectives*

ROBERT EARLY

1 Introduction¹

This paper describes the functions and use of the trilogy of Lewo terms that express what appear to be cardinal or basic postural orientations. Besides their primary regular lexical use to describe human and other animate being body stances, they can occur in various kinds of constructions with aspectual functions. The question of whether or not grammaticisation is at work in the development of these secondary functions in Lewo (Vanuatu) is discussed and serialisation is appealed to as a mechanism which provides the source syntactic structure from which grammaticisation proceeds.

1.1 Three cardinal posture orientations

Languages variously encode a large range of human physical postures, such as 'crouch', 'lean', 'hunch', 'kneel', 'tip-toe', 'head-stand', 'sit with both legs folded back to one side' (e.g. Tongan *fāite*), 'sit cross-legged' (e.g. Tongan *fakata'ane*), etc. However, of all the possible stances or body orientations that might be described, there are three that can be regarded as basic: namely, the concepts 'sit', 'stand' and 'lie'. Some variation may lay behind these labels: in some cultures, the default 'sitting' posture is actually 'squatting', and some languages may distinguish kinds of standing, e.g. of tall thin objects or of short squat objects.

These three basic stances are not hyponyms in some kind of posture taxonomy (e.g. while 'tip-toe' may clearly be a kind of 'standing', 'kneeling' does not seem to be either a kind of

¹ An earlier draft of this paper was given as a seminar presentation at the Linguistics Department, Research School of Pacific and Asian Studies, The Australian National University, in May 1995. Thanks to the staff and students of the department for their comments at that time. Orthographic symbols needing explanation in Lewo are *g*, which is a voiced velar nasal [ŋ] and *m̥* and *p̥*, which are labio-velar nasal and stop respectively. Also, POc is Proto Oceanic and PNCV is Proto North Central Vanuatu.

'sitting' or a kind of 'standing'), but they express generic or canonical human posture orientations which are conceivably lexically encoded in every language. In most languages, the posture verbs may allow both a stative reading ('to be in a sitting/standing/lying position') and an active or ingressive² one ('to move to a sitting/standing/lying position'), although this difference is sometimes encoded lexically. In English, the three terms frequently occur as the ordered formula 'sit, stand, lie' (I don't think we say 'sit, lie, stand', or 'lie, stand, sit', etc.), so we might wonder whether the relatedness and primitive semantic significance of these terms have led speakers of English to package them as a structured frame, or whether this is some kind of generalised metalinguistic jargon.

The main evidence that these three postures and the verbs that represent them are canonical or basic in some way is that they, and mostly they alone, of all the possible posture verbs, can function as an identifiable group of terms in many languages in terms of how their meaning or function can come to be extended in some way. For example, Lichtenberk (1978:3) notes for Oceanic that, of the many existential and locational verbs that occur, "only the common posture verbs seem to function as auxiliaries of other verbs in certain types of constructions".

Heine et al. (1991:152) discuss sets of basic lexemes that commonly encode source concepts from which grammaticalised forms result, and the main candidates are body part items, natural phenomena, process verbs, and "posture verbs like 'stand', 'sit'". They do not include 'lie' in that selection, but later (1991:153), state that "items specifying a position or state are among the most common source concepts, typically coded linguistically as state verbs, such as 'be/exist', 'be at', 'sit', 'stand', 'lie (down)', 'stay/live'". Among the other existential and locative verbs listed here we find our three posture forms.

However, the wider claim needs to be expressed as a tendency, rather than an absolute universal, because counter-examples can be found. For example, in the Australian language Marrithiyel, Green (1989:176) records four postural verbs that can occur as a class, as a set of verbal auxiliaries with aspectual function, viz. (in translation): 'sit', 'stand', 'lie', and 'be hanging', along with two motion verbs. He also notes (1989:179) that in certain syntactic contexts, the three verbs 'lie', 'stand' and 'be hanging' occur as a set of classificatory imperfective markers, but not 'sit'. Or, as in Yuman (North America), the three posture verbs 'sit', 'stand', and 'lie' occur in a class along with the locational/motion verbs 'stay', 'be there', 'arrive', 'go', 'come', and the verb 'make noise', as the set of forms that have come to function as locational auxiliaries (Langacker 1990:203).

1.2 Why these three verbs?

Why forms such as these three posture verbs occur as a class with functions that extend beyond their basic lexical meaning is discussed by Bybee et al. (1994:5ff.). They note that while typical lexical morphemes usually have constrained or specific meanings that restrict their range of occurrence, languages also have more generalised terms that lack specificity and are therefore appropriate in a wider range of contexts. They state that "it is lexical items of this degree of generality that are used in constructions that enter in grammaticization" (p.5), and that "the lexical items that enter into grammaticization...usually represent, in the purest fashion, the basic semantic features of their domains" (p.9; such as verbs like 'come',

² The "beginning of a situation", or the "entry into a state" (Comrie 1976:19-20).

'go', 'be', 'have', 'do'), or they encode "major orientation points in human experience" (p.10; such as verbs like 'finish', 'want'). It is this "reference plane of basic irreducible notions...which serves as the basis for grammatical meaning in human languages" (p.10), and in relation to posture, the candidates are clearly 'sit/squat', 'stand', and 'lie'. The distinction between 'sit' and 'squat' will be culturally determined, but all cultures will have one of the pair as the unmarked sitting posture. In Lewo, there is a word for 'squat', *ta-puru-puru*, but it is not one of the three posture verbs being discussed here. There is also data from other languages (e.g. for Bauan in Lichtenberk 1978) which indicates that both 'sit' and 'squat' may occur with functions extended beyond that of body orientation. However, despite minor variations like this, the three terms being considered here do appear to represent categories that are general to human experience across cultural boundaries.

Langacker (1990:207), in the language of cognitive grammar, makes the same point: these verbs "profile processes that are 'foundational' with respect to human experience: they involve a person globally, at least one invariably being applicable (a person unfailingly displays some posture...); and more significantly, a particular status in regard to motion or posture is generally prerequisite to carrying out some other (often concurrent) activity. Owing to their foundational character and limited semantic content, verbs which profile such processes are very likely to assume auxiliary function".

These comments indicate, as we will see later, that just as the grouping of basic posture verbs is predictable across languages, so too are the kinds of functional extensions that they often come to convey.

2 Posture verbs in Lewo

As already indicated, there is often a significant relationship, and sometimes overlap, between verbs of posture in a language, and other verbs expressing existential, equative and locative meanings. So before looking at the Lewo posture verbs, we note that Lewo does have an explicit copula verb *ve* 'to be' (*pe* in realis mood), which is used to express equative meanings.³

- (1) *Omami me-pe yeririna viowa lala.*
 IEXC.PL IEXC.PL.SUB-REA.be people IRR.bad PL
 'We are bad people.'

³ Abbreviations used are:

1, 2, 3	first/second/third person	EXCL	exclamation	RED	reduplication
Ø	zero morpheme	GEN	genitive	REL	relative marker
ANAPH	anaphoric	INC	inclusive	SG	singular
ART	article	IRR	irrealis	SUB	subject
AUX	auxiliary	LOC	locative	SVC	serial verb construction
COM	comitative	NOM	nominaliser	s.o.	someone
CONJ	conjunction	OBJ	object	s.th.	something
CTS	continuous	PL	plural	TA	tense-aspect
DEIC	deictic	POSS	possessive	TR	transitiviser
DUR	durative	PREP	preposition	V	verb
EMPH	emphatic	PST	past	VP	verb phrase
EXC	exclusive	REA	realis		

However, the Lewo posture verbs are employed to express existential meanings, and often, locational meanings (with the general locational preposition *e*) as well, as will be indicated further later.

The three main posture verbs in Lewo are *to* ‘sit’, *su* ‘stand’ and *mo(no)* ‘lie, stay, dwell’ (*mo(no)* usually, but not always, occurs as *mono* when word final, and as *mo* when suffixed in some way). The first two appear to be fairly regular reflexes of reconstructed PNCV and POc etyma, but *mo(no)* may derive from POc **mono* ‘stay, stay behind’ (although it currently constitutes the only attestation of a Vanuatu reflex of POc **mono* in Ocelex, other reflexes being found in Western Oceanic and South-east Solomonic), or from a fusing of the Proto Epi (PNCV?) realis marker **m(i)* and the PNCV verb **eno* ‘lie’ (*mo(no)* is not marked for realis or irrealis in Lewo).

Table 1: Lewo posture verbs

	POc (Ocelex 24.5.95)	PNCV (Clark 1994)	Lewo
‘sit’	<i>*toka</i> ⁴	<i>*toka/*toko</i>	<i>to</i>
‘squat on heels’	<i>*tike</i>		
‘stand’	<i>*tuqur(i)</i>	<i>*tu-ra</i> ⁵	<i>su</i>
‘lie’	<i>*qeno(p)</i> ⁶	<i>*eno</i> ⁷	
‘stay, stay behind’	<i>*mono</i>		<i>mo(no)</i>
‘dwell’	<i>*nopo</i>		

2.1 Main functions

The three main posture verbs occur with their primary senses (§2.1.1–§2.1.2), but we will see that this can be extended in various ways (§2.1.3ff.).

2.1.1 Primary sense

The primary sense of these verbs is to indicate a particular body orientation, prototypically for human subjects.

- (2) *O-to-ga e-n.*
2SG.SUB-sit-just LOC-DEIC
‘Just sit here.’

- (3) *Ø-kiri Ø-kiri Ø-kiriri Ø-su Ø-sape...*
3SG.SUB-run 3SG.SUB-run 3SG.SUB-RED.run 3SG.SUB-stand 3SG.SUB-say.that...
‘He ran and ran on then stood (still) and said...’

⁴ Glossed as ‘sit, come to rest, settle’.

⁵ Clark (1994) gives the POc source as **tuqur*.

⁶ Glossed as ‘lie down, sleep’.

⁷ Clark (1994) gives the POc source as **qenop*.

- (4) *Ø-mu-ni-a* *Ø-mono* *miau Ø-ñe-a.*
 3SG.SUB-drink-TR-3SG.OBJ 3SG.SUB-lie kava 3SG.SUB-REA.hit-3SG.OBJ
 'She drank it, lay down, the kava got her.'

2.1.2 Activities associated with the posture

Posture verbs can occur to indicate participation in an activity with which the posture is usually associated in some way. Williams (pers. comm.) indicates that for Russian, all the verbs 'sit', 'stand', and 'lie' can occur in this way (to 'get on the metro' one 'sits on the metro' etc.), but notes that only the verb *stat'* 'to assume a standing position' undergoes the kind of extension we will see later, whereby it comes to express inchoativity: 'become, begin'. In English, when we say that someone is 'standing by', the chances are that they are sitting! Lewo operates similarly:

- (5) *Vio-r-ena* *Ø-to* *tano* *garo Ura.*
 call-meet-NOM 3SG.SUB-sit down PREP (place)
 'The meeting will be held (sit) down at Ura.'
- (6) *Lala a-mono* *ma yuñā na inana-ena.*
 3PL 3PL.SUB-lie PREP house GEN ill-NOM
 'They are/are staying/have been admitted up at the hospital.'
 (lit. 'house of illness.')
- (7) *Naga ñena Ø-su-ñalu* *Ø-sape* *a-ve*
 3SG too 3SG.SUB-stand-straight 3SG.SUB-say 3PL.SUB-IRR.be
vot e naga.
 vote LOC 3SG
 'He too stood (as a candidate) wanting them to vote for him.'

2.1.3 Generalisation of posture sense to existential meaning

It is possible that the meaning of posture verbs may be extended to include existential and locational meanings, but it is more likely that existence and location are already inherently part of the meaning of such verbs. Subsequently however, the component of meaning of postural orientation or shape of the physical stance may be bleached out of them. This gives rise to the situation where posture verbs come to express little more than a generalised existential or locational meaning, even in languages which already have an existential verb of some kind. Lichtenberk (1978:4-5) distinguishes unmarked and marked posture verbs respectively as those which can occur as existential or locational verbs with no particular posture implied, and those which always convey the relevant posture, even when used to express existence or location.

An unmarked posture verb in Lewo is *su*. It has a primary postural sense, and also, as in example (3) above, can convey the meaning 'stop' (there is no other verb in Lewo that carries this meaning in a non-prohibitive sense). However, it can also occur with just the general existential/locational meaning 'be at, live'.

- (8) *O-su pe?*
2SG.SUB-stand where
'Where have you been?'
- (9) *Su-su-mo a-su Nikaura.*
RED-stand-in.front 3PL.SUB-stand (place)
'Before, they stayed at/lived in/were at Nikaura.'

This is also the case for *to* and *mo*. They do not often occur as main verbs without the aspectual particles that are appropriate to inherently durational situations like 'exist' (although see *to* in (10)), but can be found in relative clauses without them (11):

- (10) *Sisi tai Ø-to.*
child ART 3SG.SUB-sit
'There was a young child.'
- (11) *E yuṁa naṁa yaru nene Ø-mo e-a.*
LOC house REL man DEIC 3SG.SUB-lie LOC-3SG.OBJ
'At the house where that man slept/lived/was.'

The question of how much of the posture-related meaning has in fact been bleached out of these terms as they come to function as existentials is not always easy to resolve.

2.1.4 *Use with non-human arguments*

It is probably very common, if not universal, for languages to allow inanimate objects to have 'legs', and to 'stand', or even to be legless but able to 'stand', and for things without 'bottoms' to 'sit', and for things without 'backs' to 'lie'. We anthropomorphise objects to possess body parts, and to adopt characteristic postures in ways that are modelled on how we conceptualise and express what the human body does. Sometimes, the fit is not always perfect, such as, for example, bottles, which do not have 'heads' or 'legs', but do have 'mouths' 'necks' and 'bottoms', but which, if not 'lying' on their 'sides', mostly 'stand', but can sometimes 'sit' (at which point aspectual meaning seems to be involved, expressing temporal duration). This example points out that when posture verbs are used in this way, there is not only the physical orientation of the entity to take into account, but also the perception of the physical shape of the object, which in turn is determined by factors such as its relative dimensions.

There are many instances in Lewo where the postural verbs appear with their direct postural sense with non-human subjects. For example, long thin objects, especially trees, often need to be talked about in this way.

- (12) *Puru-maru tai Ø-to-ro puru-maru tai.*
tree-coconut ART 3SG.SUB-sit-in.two tree-coconut ART
'One coconut palm was cutting across another.'
- (13) *Puru-maru tai Ø-su-ro yuṁa lala.*
tree-coconut ART 3SG.SUB-stand-in.two house PL
'A coconut palm was standing in between the houses.'

- (14) *Puru-maru tai Ø-mono-ro mrapa.*
 tree-coconut ART 3SG.SUB-lie-in.two road
 'A coconut palm is lying flat across (blocking) the road.'

Also, if someone wants to ask where something has been put, the posture verb used will be the one that is usually appropriate to the particular postural orientation that the object occurs with.

- (15)a. *O-m-ligan Ø-to pe?*
 2SG.SUB-REA-put 3SG.SUB-sit where
 'Where did you put it?' (a saucepan)
- b. *O-m-ligan Ø-su pe?*
 2SG.SUB-REA-put 3SG.SUB-stand where
 'Where did you put it?' (a chair)
- c. *O-m-ligan Ø-mo pe?*
 2SG.SUB-R-put 3SG.SUB-lie where
 'Where did you put it?' (a mat)

2.1.5 Occurrence in nuclear layer serial constructions

The posture verbs can occur as the main verb in nuclear layer serial verb constructions, allowing for various modifications and expansions of their basic meaning to be expressed.

- (16) *to-kaapara su-kaapara mon-kaapara*
 sit-take.too.long stand-take.too.long lie-take.too.long
 'to sit/stand/lie for an excessively long time'

Mostly, the meaning is transparently synthesised from the meanings of the two components (as in a. and b. below), but in some cases, some kind of idiomaticisation or lexicalisation of the meaning occurs (as in c., where to say 'lie straight' would be *mono mesmesu* (lie + straight)).

- (17)a. *to-ñmalu*
 sit-straight
 'to sit from a lying position, to sit up'
- b. *su-ñmalu*
 stand-straight
 'to stand from a sitting position, to stand up'
- c. *mo-ñmalu*
 lie-straight
 'to be correct, to be right.'

Sometimes, the three posture verbs are obligatory components of nuclear layer serial verb constructions (SVCs) which convey what in other languages might be regarded as basic or monolexemic meanings. For example, Lewo does not have any independent monomorphemic verbal lexeme for the concept of 'wait (for someone/something)'.

- (18) *to-mate* *su-mate* *mo-mate*
 sit-wait stand/be.at-wait lie-wait
 'to sit/stand/lie waiting for someone/something'

Sometimes there are variations in the occurrence privileges of the posture verbs with the serialised component. For example, the paradigm of posture verbs plus complex expressions meaning 'in front' or 'behind' is complete (19), but only *su* (perhaps with its more general existential meaning) can occur alone with the directional elements (20).

- (19)a. *to va-mo* *su va-mo* *mono va-mo*
 sit go-in.front stand go-in.front lie go-in.front
 'to sit/stand/lie at the front of something'
- b. *to va-rau* *su va-rau* *mono va-rau*
 sit go-behind stand go-behind lie go-behind
 'to sit/stand/lie at the back of something'
- (20) *su-mo* *su-rau*
 stand-in.front stand-behind
 'to be ahead of; to lead; to be first' 'to be behind; to follow; to be last'

To obtain the specific meaning of, for example, 'sitting first', a combination of verbs is required:

- (21) *Me-to* *tano Ø-su-mo.*
 1PLEXC.SUB-sit down 3SG.SUB-stand-in.front
 'We sat down first.'

2.1.6 Co-occurrence with imperfective aspect markers

In previous sections, the idea of the postural component of meaning being bleached from the posture verbs was mentioned. We see more of this now, where the posture verbs occur with the imperfective aspect markers *ke* 'continuous/progressive aspect' and *ma* 'durative/iterative/habitual aspect'. These sub-categories of aspect type, and the labels used, conform quite closely to Comrie's (1976:25) "classification of aspectual oppositions".

Continuous situations (marked with *ke*) are those which continue over, or are continuing at, the relevant period of temporal focus, which in oral interaction, is usually the present moment of speech.

- (22) *Naga Ø-pisa* *ke ai?*
 3SG 3SG.SUB-REA.say CTS who
 'Who is he talking about?'

In narrative texts, the relevant centre of temporal focus is the time context (usually past) of the events being described, and so situations that proceed throughout this period will be marked with *ke*.

- (23) *Ø-m-ligan nari-na Ø-mono ke e-a*
 3SG.SUB-REA-leave child-3SG.POSS 3SG.SUB-lie CTS LOC-3SG.OBJ
na Ø-pa Ø-te ke kiai.
 CONJ 3SG.SUB-REA.go 3SG.SUB-cut CTS wild.cane
 'She left her child lying there and went cutting wild cane.'

Where the period of temporal focus is the whole of an episode of time, then *ke* marks events that have continued, possibly on a repeated (with disruption) basis, throughout that time span.

- (24) *Ko na o-ka-ka-n-plan ke suri ka-na*
 2SG EMPH 2SG.SUB-RED-eat-TR-all CTS thing POSS-3SG.POSS
kia-u nompui lala.
 POSS-1SG.POSS pig PL
 'You're the one who keeps eating my pigs' food.'

Durative situations, marked with *ma*, are those which entail temporal duration. "Durativity simply refers to the fact that a given situation lasts for a period of time (or at least is conceived of as lasting for a certain period of time)" (Comrie 1976:41). As well, habitual situations or repeated situations without perceived disruption can be expressed with *ma*.

- (25) *Vio Ø-mono ma Ø-kla-yo-n ma ka-na*
 heron 3SG.SUB-lie DUR 3SG.SUB-do-place-TR DUR POSS-3SG.POSS
mra-kiavi.
 fruit-clam
 'Heron remained on, trying (to break open) his clam shell.'

The functions of *ke* and *ma* are contrasted in (26), and we will see later in example (52) that they may also occur together in the same clause.

- (26) *Wa-mara-na Ø-pito Ø-m-yae-wo-wo*
 liquid-eye-3SG.POSS 3SG.SUB-REA-go.down 3SG.SUB-REA-stab-RED-through
ke kulali. Ø-m-yae-po ma Ø-sa-ne na
 CTS coral.stone 3SG.SUB-REA-stab-break DUR 3SG.SUB-be.like-DEIC CONJ
Ø-m-loge suri tai Ø-kapuru.
 3SG.SUB-REA-hear thing ART 3SG.SUB-crack
 'Her tears fell down stabbing the coral stones. (They) stabbed on like this, she heard something crack.'

Single syllable post-verbal particles like *ke* and *ma* become unstressed and participate in the phonological word structure of preceding single syllable verb stems, i.e. they encliticise to them. Combined with the posture verbs, and with them alone in Lewo, we find the first hints of a morphophonological/grammaticisation process, with the phonological shape of the combinations being slightly altered in most cases.

Table 2: Posture verbs and tense-aspect particles

	+ <i>ke</i>	+ <i>ũa</i>
<i>to</i> 'sit'	<i>teke</i>	<i>toũa</i>
<i>su</i> 'stand'	<i>sike</i>	<i>suũa</i>
<i>mono</i> 'lie'	<i>ũake/ũagke</i>	<i>moũa</i>

The vowel fronting in *to* → *te*-, *mo* → *ũa*- and *su* → *si*- appears to result from regressive assimilation to the vowel in *ke*, but there are some irregularities in these forms. Speakers regard the first set of forms with *ke* as unsegmentable, but vary in their perceptions about the second set with *ũa*.

These combinations of posture verb and aspect marker readily occur in Lewo as main verbs, but it is not long before data like the following start raising questions:

- (27)a. *Me-to-ũa* *Vila*.
 1PL.EXC.SUB-sit-DUR (place)
 'We stayed in Vila.'
- b. *Me-su-ũa* *Vila*.
 1PL.EXC.SUB-stand-DUR (place)
 'We lived at/stayed at Vila.'
- c. *Me-mo-ũa* *Vila*.
 1PL.EXC.SUB-lie-DUR (place)
 'We lived in Vila.'

As well, one is likely to hear any one of the following three questions when someone is asking where some other people are:

- (28)a. *E, Malina la a-te-ke pe?*
 EXCL (name) PL 3PL.SUB-sit-CTS where
 'Hey, where are Malina and the others?'
- b. *E, Malina la a-si-ke pe?*
 EXCL (name) PL 3PL.SUB-stand-CTS where
 'Hey, where are Malina and the others?'
- c. *E, Malina la a-ũa-ke pe?*
 EXCL (name) PL 3PL.SUB-lie-CTS where
 'Hey, where are Malina and the others?'

With these questions, the speaker seldom has any knowledge or even any presupposition of what the postural stance of the people being asked about might be. What appears to be happening is that the postural meaning is more or less obliterated, and the distinction between the three questions is solely aspectual. In this case, all the posture verbs have become reduced to expressing existential meanings, with the distinction that *su* 'stand' indicates general existence, *to* 'sit' indicates temporary or short duration, and *mono* 'lie' indicates extended or permanent duration, but all in a fairly relative way. The next set of examples further demonstrate the loss of postural meaning by the posture verbs.

- (29) *Naga Ø-pa Ø-si-ke amio sira naḗa-ni.*
 3SG 3SG.SUB-REA.go 3SG.SUB-stand-CTS COM girl this
 ‘He went and was staying/living with this girl (lived with her family, no relationship).’
- (30) *Naga Ø-pa Ø-te-ke amio sira naḗa-ni.*
 3SG 3SG.SUB-REA.go 3SG.SUB-sit-CTS COM girl this
 ‘He went and was staying with this girl (short relationship).’
- (31)a. *Naga Ø-pa Ø-ṁe-ke amio sira naḗa-ni.*
 3SG 3SG.SUB-REA.go 3SG.SUB-lie-CTS COM girl this
 ‘He went and was living with this girl (set up home together).’
- b. *Naga Ø-pa Ø-mono ke amio sira naḗa-ni.*
 3SG 3SG.SUB-REA.go 3SG.SUB-lie CTS COM girl this
 ‘He went and was lying/sleeping with this girl.’

2.1.7 Non-human subject and tense-aspect markers

The potential for semantic bleaching of the posture verb in the situations of either non-human subjects or imperfective aspect has been demonstrated. When the two are combined, the meaning of limited or extended duration can completely overtake the postural meaning.

- (32) *O-m-ligan Ø-te-ke pe?*
 2SG.SUB-REA-put 3SG.SUB-sit-CTS where
 ‘Where did you put it (and it’s just been there a short time)?’
- (33) *O-m-ligan Ø-si-ke pe?*
 2SG.SUB-REA-put 3SG.SUB-stand-CTS where
 ‘Where did you put it?’
- (34) *O-m-ligani Ø-ṁe-ke pe?*
 2SG.SUB-REA-put 3SG.SUB-lie-CTS where
 ‘Where did you put it (and it’s been there for a while)?’

In the next example, the reading is clearly that the tree was alive and standing, with the ‘lie’ postural verb indicating extended temporal duration.

- (35) *Pawa puru-tawo tai Ø-ṁe-ke e-a.*
 big tree-nut ART 3SG.SUB-lie-CTS LOC-3SG.OBJ
 ‘There was a big nut tree there./There had been a big nut tree there for some time.’

Some problematic cases occur however. How are we to understand posture or duration as having any relevance to the position of coral reefs?

- (36) *Piaṁe Ø-su lele naḗa-ni.*
 reef 3SG.SUB-stand place this
 ‘There was (a) reef at this place.’

- (37) *Piaṃe piavi na Ø-ṃe-ke gar.*
 reef long EMPH 3SG.SUB-lie-CTS over.there
 'There was a long reef over there.'

Elsewhere, objects such as stones, canoes, houses, plantations occur as subjects with both *su* and *mo*, and items such as words on a page, objects hanging, and snake occur with *to* and *mo*, and similarly in other cases.

It seems that across languages, the occurrence of more than one unmarked posture/existential/location verb is not uncommon. Lichtenberk (1978:6) has commented that "many Oceanic languages have more than one such unmarked existential/location verb but explicit statements concerning the restrictions on their use are either totally lacking or are extremely sketchy".

In many cases, the different verbs develop functions that are not directly related to their original postural meaning. In some cases, the postural verb that is used to express existential and locative meanings depends on the type of subject. When I was trying to understand at an earlier stage why there appeared to be three different existential verbs in Lewo, which is how it looked at first, it was interesting to note that Lewo speakers did have an intuition themselves about the difference between them, and it had to do with the nature and type of the subject entity. They will say that *te-ke* (*to* 'sit') is used for small or light objects, and *ṃe-ke* (*mono* 'lie') for large or heavy objects, and *si-ke* ('stand') just means something 'is' or 'is there'. They do not make any connection with duration, but there is certainly a wider real-world correlation between small objects and mobility/temporary positional duration on the one hand, and large objects and immobility/permanence of positional duration on the other. For the similar situation in the closely-related Lamén language, speakers' perception is that *so-ṃa* (*so* 'sit') is used for singular arguments, and *mo-ṃa* (*mono* 'lie') for plural, which does seem to correspond to the facts for that language.

Lichtenberk (1978:18) notes that different posture verbs, where they take on an existential or locative function, are associated with different types of subjects in several Oceanic languages (e.g. Manam and Gitua in Table 3 below), and concludes for these subject types that:

- an animate/inanimate distinction is common, and
- animate subjects tend to take 'sit', and inanimates take 'lie'.

Table 3: Subject types of posture verbs as existentials

	sit	stand	lie
Manam	humans and higher animals, boats at sea	standing trees	everything else
Gitua	animate subjects		inanimates
Lewo	small objects, temporary duration	unmarked	large objects, permanent duration
Lamen	singular		plural

2.2 Secondary functions

The posture verbs in Lewo take on a secondary function when they occur along with other main verbs. In some languages, this arrangement would be described as an auxiliary-main verb construction, but in Lewo the way in which these two verb sequences are structured and patterned is exactly the same as other regular core layer serial verb constructions. Posture verbs can occur as the first or the second verb in these serial constructions, and have different functions in each case.

2.2.1 Posture verbs in second place in serial constructions

Where an event or action is presented as having taken place in a particular location, a serialised verb of posture is usually used to incorporate the prepositional phrase or locational noun identifying the location within the clause. Another way of saying this is that general activity verbs do not usually occur with non-core locational arguments, while such arguments seem particularly compatible with, and prefer to be associated with, verbs of posture. The function of the posture verbs in this case is to mark location.

- (38) *Ne-mare-lae* *Ø-to* *mrapa*.
1SG.SUB-die-accident 3SG.SUB-sit road
'I fainted on the road.'
- (39) *Ø-pim* *Ø-su-m̃alu* *Ø-su* *mratava*.
3SG.SUB-REA.come 3SG.SUB-stand-straight 3SG.SUB-stand door
'She came and stood at the door.'
- (40) *Leriko* *Ø-kla-ruru* *m̃a-la* *togi* *Ø-mono-ga* *mratava*.
elf 3SG.SUB-do-do.well POSS-3PL.POSS mat 3SG.SUB-lie-just door
'The elf prepared a mat for them at/across the doorway.'

In the above cases, the postural component of meaning of the verb seems to be present. However, more frequently, the posture verb will occur with one of the two aspect markers already seen, and in this case the postural orientation is masked. Examples with *ke* 'continuous' include:

- (41) *Ø-pa* *Ø-tapolou* *Ø-te-ke* *e* *pulu-p̃alu*.
3SG.SUB-go 3SG.SUB-hide 3SG.SUB-sit-CTS LOC hole-creek
'He went and hid in the creek-bed.'
- (42) *A-mapila* *yuwi* *Ø-si-ke* *e-a* *kla-varu* *telu*
3PL.SUB-plant yam 3SG.SUB-stand-CTS LOC-3SG.OBJ stone three
nene *a-mapila* *Ø-su-ga* *Ø-si-ke-na*.
DEIC 3PL.SUB-plant 3SG.SUB-stand-just 3SG.SUB-stand-CTS-EMPH
'They planted a yam (standing) at these three stones, they planted it (it is still standing) there.'
- (43) *A-sin* *la* *a-si-ke* *e* *yo* *naṗa* *a-sape* *Pigki*.
3PL.SUB-bury 3PL 3PL.SUB-stand-CTS LOC place REL 3PL.SUB-say (name)
'They buried them at the place called Pigki.'

Examples with *ma* 'durative' include:

- (44) *Ne-tawa ne-su-ma e-a...*
 1SG.SUB-hang 1SG.SUB-stand-DUR LOC-3SG.OBJ
 'I hung from it until...'
- (45) *Ø-tapolou Ø-mo-ma na Ø-pisu sira naḗa-ni.*
 3SG.SUB-hide 3SG.SUB-lie-DUR CONJ 3SG.SUB-REA.see girl this
 'He kept on hiding and watching the girl.'

How are we to understand the difference between *tapolou te-ke* (41) and *tapolou mo-ma* (45) above, when posture is not being conveyed, and neither does the size of the object seem relevant? Once again it is possible that temporal duration (limited and extended) is being conveyed along with the locational function. All nine possible combinations of posture verbs ± imperfective particle can occur in this situation, and so we might be tempted to construct a regular paradigm as below, but in fact in many cases it is often difficult to distinguish between them.

Table 4: Array of posture verb and imperfective particle combinations

	alone	+ <i>ke</i>	+ <i>ma</i>
'sit'	<i>to</i> posture	<i>teke</i> location, continuous for limited duration	<i>to-ma</i> location, limited duration
'stand'	<i>su</i> posture	<i>sike</i> location, continuous	<i>su-ma</i> location, duration
'lie'	<i>mono</i> posture	<i>meke</i> location, continuous for extended duration	<i>mo-ma</i> location, extended duration

2.2.2 Posture verbs as the first verb in serial constructions

The three Lewo posture verbs can also occur as the first verb in core layer serial verb constructions. In this situation, the verbs may occur alone (with their usual postural reading):

- (46) *Naga Ø-to-ga Ø-te-ke na.*
 3SG 3SG.SUB-sit-just 3SG.SUB-sit-CTS EMPH
 'He was just sitting down.'

However, in this position the posture verbs will more often take some other marking. Frequently, they will occur with the durative aspect particle *ma* to express durative (including habitual and frequentative) aspect, and less commonly, they will occur with the transitiveiser *-ni* to express another kind of imperfective aspect, namely simultaneous action, which we now discuss.

2.2.2.1 Simultaneous aspect

In this situation, the orientational meaning of the posture verbs remains somewhat intact, although *su* 'stand' can be read with its more general locational sense 'be at'.

- (47) *Sira na Ø-to-n Ø-pisu-ari ke.*
 woman EMPH 3SG.SUB-sit-TR 3SG.SUB-REA.see-carry CTS
 'The woman was sitting and watching.'
- (48) *Ø-kla-ṗele-yo Ø-mono-n Ø-m-lokai-wowe ṁa-ga.*
 3SG.SUB-do-unable-place 3SG.SUB-lie-TR 3SG.SUB-REA-cry-crazy DUR-just
 'She couldn't do it (so) just stayed (lay) there crying madly.'
- (49) *Si Ø-m-yani la ṗisa a-su-n*
 sea 3SG.SUB-REA-sweep 3PL indeed 3PL.SUB-stand-TR
a-ka-ka-wowe-e na.
 3PL.SUB-RED-fly-crazy-DUR EMPH
 'The sea swept them about, they were staying there flying crazily around.'

2.2.2.2 Durative aspect

Once again we see the posture verbs occurring with the durative aspect marker *ṁa*, and in this case the postural meaning is largely overtaken, if not obliterated, by the durative aspectual meaning of the combination. The progressive deverbalisation of the posture verb in this situation makes it look like the kind of dummy pro-verb that frequently functions as an auxiliary.

- (50) *Sira naṗa Ø-to-ṁa Ø-tag ṁa Ø-sa-ne*
 woman REL 3SG.SUB-sit-DUR 3SG.SUB-cry DUR 3SG.SUB-be.like-DEIC
na.
 EMPH
 'The woman was crying on like that.'
- (51) *Sisi kokan la a-su-ṁa a-tag ke-ga wa.*
 child small PL 3PL.SUB-stand-DUR 3PL.SUB-cry CTS-just yet
 'The children are still crying.'
- (52) *Ø-kla ke Ø-kla ke Ø-su-ṁa Ø-kla*
 3SG.SUB-do CTS 3SG.SUB-do CTS 3SG.SUB-stand-DUR 3SG.SUB-do
ke ṁa-ga.
 CTS DUR-just
 'He was doing it (stealing food), doing it, kept on doing it.'
- (53) *Ø-mo-ṁa Ø-pisu ṁa Ø-sape...*
 3SG.SUB-lie-DUR 3SG.SUB-REA.see DUR 3SG.SUB-say
 'She kept on watching and said...'

The ubiquity of the posture verbs in all these various primary and secondary uses sees them featuring with some degree of frequency in texts.

- (54) *Sira naṗa-ni Ø-su-ṁalu Ø-su-ṁa*
 girl this 3SG.SUB-stand-straight 3SG.SUB-stand-DUR
Ø-su-mate yerṁene naṗa.
 3SG.SUB-stand-wait boy that
 'The girl stood waiting on for the boy.'

3 Posture verbs and grammaticisation theory

Now that we have explored the kinds of functions and syntactic contexts in which the three main Lewo posture verbs can occur, we will relate these findings to some of the wider literature dealing with posture verbs and grammaticisation theory.

3.1 Grammaticisation of posture verbs

Williams (1994) surveyed what happens to posture verbs if and when they grammaticise, and summarises that they do so in either of two different directions: they either become tense-aspect markers, or copula verbs.

3.1.1 Posture verbs as tense-aspect markers

When posture verbs grammaticise, they frequently become tense-aspect markers, usually indicating progressive. Languages that are known to do this, cited by Williams, are Hebrew ('stand' + verb = immediate future), Dutch (posture verb + infinitive = progressive), Siouan, Yuman, Uyghur (Turkic), Hindi, and Nepali (posture verb = aspect marker). For example:

- (55) *Ik zit een boek te lezen.* [Dutch]
 I sit a book to read
 'I am reading a book.'

Another example, from Green (1989:175-177), shows how the same posture verb 'sit' occurs as a verbal auxiliary expressing imperfective aspect in Marrithiyel (56)b, and further, how a motion verb can also occur in the same way to express continuative aspect (56)c.

- (56)a. *Leta gagan ngidin-a.* [Marrithiyel]
 letter ANAPH 1SG.SUB.REA.see-PST
 'I saw that letter.'
- b. *Leta gagan ngidin gangi-ya.*
 letter ANAPH 1SG.SUB.REA.see 1SG.SUB.REA.sit-PST
 'I sat looking at (i.e. reading) that letter.'
- c. *Leta gagan ngidin ngin-a.*
 letter ANAPH 1SG.SUB.REA.see 1SG.SUB.REA.go-PST
 'I continued looking at (i.e. reading) that letter.'

- d. *Leta gagan ngidin-a gangi-ya.*
 letter ANAPH 1SG.SUB.REA.see-PST 1SG.SUB.REA.sit-PST
 'I saw that letter. I was sitting down.'

Bybee et al. (1994) look at the development of progressive marking devices in languages, and show that posture verbs are a frequent source for them. Out of 45 instances of progressives from their database whose sources are transparent, 23 show the progressive deriving from expressions involving locative elements. Other sources are motion expressions, copula constructions, reduplication, and others like 'engaged in', 'do', 'continue', 'hard', and 'now'. There were just 9 other progressives whose sources were unknown. Of the 23 sources involving locational elements, the form is specifically related to posture in 10 cases ('sit': 6, 'stand': 3, 'lie': 1), to location in 10, and to existence in 3 (Table 5.1, 1994:128).

Again, of the 45 progressives whose sources are known, the large majority (31) are (or include) an auxiliary element of some kind. Other manifestations are as suffix (3), reduplication (4), participle (5) or are unlisted (2). The 31 auxiliaries may, in turn, "derive from a specific postural verb, such as 'sit', 'stand', or 'lie'", or may express the notion of being in a location without reference to a specific posture: 'be at', 'stay', or, more specifically, 'live', 'reside' (pp.129-130).

Similarly, Lehmann (1993:324) says that "cross-linguistic evidence shows that it is primarily verbs of bodily disposition ('stand, sit') and movement ('come, go'), control verbs such as 'begin, finish, keep'...that are grammaticalized to auxiliaries or aspectual formatives."

Traugott (1978:388) also recognises that "verbs with the feature 'be in existence, be located at' in combination with more specific features, especially for remaining, standing, sitting, or lying" are a common source for progressive surface forms. However, she considers that the "two major types of grammaticalized expressions for the progressive are 'cases' (includes inflections, adpositions, particles, auxiliaries),...(and) locative/existential/possessive copulas".

For Oceanic languages, Lichtenberk (1978:24) shows that they "may use existential/locational verbs as verbal auxiliaries, most likely with the meaning of 'continuative, progressive, persistive aspect'". Some of the data he presents is summarised in Table 5.

Table 5: Aspectual meanings conveyed by selected existential/locational verbs
 (Lichtenberk 1978)

	'live'	'sit'	'squat'	'stand'	'lie'
Manam		progressive			persistent
Bauan		progressive	provisional, temporary	permanence	
Motu	duration, persistence				
Numbami	continuation	progressive			location

We can also note that the expression of tense-aspect marking is one of the most common functions of serial verb constructions as identified by Givón (1991:82-83; along with case-role marking, verb co-lexicalisation, deictic-directional marking, and evidentiality and epistemic marking).

3.1.2 Posture verbs as copula

The second function that posture verbs may develop is that of a copula. Williams says that posture verbs may “compete with the copula (as in German or Russian), or develop into a copula (as in Spanish)”. In these cases, the posture verbs, as new-found copula verbs, may either retain the semantic component of physical orientation, or this may be reduced so that they express simply notions of existentiality, equationality, or locationality.⁸ An example of this, cited by Williams, is:

- (57) *Butylka stoit na stole.* [Russian]
 bottlestand on table
 ‘The bottle is on the table.’ (in the unmarked standing orientation)

3.2 Lewo posture verbs and grammaticisation parameters

The description of the secondary functions of the Lewo posture verbs considered them to be participating in the SVCs commonly found in the language, and as such, they are largely indistinguishable from other regular formations in the language. It was recognised as well that in those contexts, they could also be described in synchronic syntactic terms as verbal auxiliaries, just as Lichtenberk (1978:20ff.) did for similar situations in other Oceanic languages. However, now that it has been observed from the literature that posture verbs are frequently sources for grammaticisation as tense-aspect markers, we might want to ask whether or not processes of grammaticisation can be identified, or need to be appealed to, as being at work in this part of the structure of Lewo.

The close similarity of the secondary uses of the posture verb to other regular construction types means that some definitions of grammaticisation are not quite so helpful. Foley (1993:9) says that “grammaticalization is a process whereby independent lexical items come to function as grammatical morphemes thus creating structure”, but we are a little unsure about describing the *te-ke* etc. forms, especially when they carry a locational or existential meaning, rather than a purely aspectual one, as “grammatical morphemes”. Lehmann (1993:315ff.) says that “If a sign is transferred to a more grammatical status, it is grammaticalized...grammaticalization is the transfer of a sign from the lexicon to the grammar...grammaticalization moves a sign to a lower grammatical level”, but the Lewo posture verbs retain their body orientation component of meaning to a sufficient extent that these terms deserve entries in the lexicon of the language. Perhaps there are more fundamental questions to be considered first, namely: how can grammaticality (grammaticalness) be measured, when it is apparently marginal, and along what scale can degrees of lexicality versus grammaticality be assigned? These concerns are clearly relevant here, and apply in other problematic mid-points and fuzzy border categories in Oceanic

⁸ Languages cited by Williams that retain the orientation are Kamchadal (Paleo-Siberian), German, Dutch, and Russian, while those that do not are Gaelic, Spanish, Portuguese, Japanese, and an “Australian” language. Williams also reports an apparent third strategy, whereby the posture verb ‘stand’ in Malay has come to be used as a voice-altering suffix, and in the pronoun system. Bybee et al. (1994:131) report that Heine has claimed that progressives can be derived from equational sentences, but they question the interpretation of the evidence he gives, and claim instead that “aside from movement sources, reduplications, and constructions with verbs meaning ‘to keep on’, all progressives derive from locative constructions”.

grammar as well, such as for verbal prepositions, or in situations like that discussed by Wilson (in this volume) for Maori, where two apparently synonymous progressive tense-aspect construction types exist, with a considerable degree of stability, side by side in the language.

Hopper (1991:21-28) also refers to “the problem of identifying grammaticization when it is not already obvious”, as the usual parameters or measures employed (such as contraction, condensation, or coalescence) mostly only work when it is already patently obvious that grammaticisation has occurred. Hopper proposes other factors that might be “diagnostic of the emergence of grammatical forms and constructions out of already available material” and that help assessments be made of “different degrees of grammaticization”. He proposes five principles of grammaticisation, and in Table 6 connection is made between them and observations we have already made about the Lewo posture verbs, after which two of them are discussed more fully.

Table 6: An application of Hopper’s (1991) grammaticisation diagnostics to Lewo

layering	“more than one technique is available in a language to serve similar or even identical functions” Lewo: particularly apparent for the marking of durative aspect, see below
divergence	“the original form may remain as an autonomous lexical element” alongside the “cognate grammatical form” Lewo: the posture verbs all still occur with their primary senses
specialisation	“there is a narrowing of choices that characterize an emergent grammatical construction” which can ultimately lead to obligatoriness of the item Lewo: posture verbs are fairly obligatory in marking location for other verbs
persistence	“during intermediate stages it may be expected that a form will be polysemous, and that one of its meanings will reflect a dominant earlier meaning” Lewo: the component of postural meaning is variously perpetuated, see below
decategorialisation	“there will be a loss of the optional markers of categoriality” Lewo: this feature is not readily applied to Lewo

Layering: One concern with the Lewo data was the continuation within the language of a number of similar strategies for expressing a single category of meaning. For example, the following three sentences are given different translations, but perhaps only artificially so, and whether the language can continue to maintain these three separate strategies for marking duration remains to be seen, particularly when repetition, reduplication, and final vowel lengthening can also serve the same function.

- (58) *A-kinana mā-ga.*
3PL.SUB-eat DUR-just
'They were eating.'
- (59) *A-kinana Ø-mo-mā-ga.*
3PL.SUB-eat 3SG.SUB-lie-DUR-just
'They ate on.'
- (60) *A-mo-mā a-kinana.*
3PL.SUB-lie-DUR 3PL.SUB-eat
'They continued eating.'

More extensively, in Table 7, we find that serialisations of the main verb *ligan* 'put, leave' with various combinations of the posture verbs, imperfective markers *ke* and *mā*, the emphatic particle *na*, and a nuclear layer serial verb *-māra* 'alone', can all be translated as 'Leave it!' (although pragmatic nuances of politeness are involved as well):

Table 7: Multiple expressions using posture verb serialisations

	Ø	<i>to</i>	<i>su</i>	<i>mo(no)</i>
Ø	<i>o-ligani-a</i>			
<i>mā</i>	<i>o-ligan mā-ga</i>	<i>o-ligan Ø-to-mā-ga</i>	<i>o-ligan Ø-su-mā-ga</i>	<i>o-ligan Ø-mo-mā-ga</i>
<i>ke</i>		<i>o-ligan Ø-te-ke</i>	<i>o-ligan Ø-si-ke</i>	<i>o-ligan Ø-me-ke</i>
<i>ke + na</i>		<i>o-ligan Ø-te-ke-na</i>	<i>o-ligan Ø-si-ke-na</i>	<i>o-ligan Ø-me-ke-na</i>
<i>-māra</i>		<i>o-ligan Ø-to-māra</i>	<i>o-ligan Ø-su-māra</i>	<i>o-ligan Ø-mo-māra</i>

However, this situation is not incompatible with grammaticisation taking place. Bybee et al. (1994:21) state that "the rise of a new marker is not contingent on the loss or dysfunction of its predecessors, as traditional views of change have sometimes suggested". Similarly, "since the development of individual grams is independent, we are not surprised to find some overlap in the function of grams and the continuous introduction of new grams into the grammatical system despite the prior existence of functional grams" (p.300). They also allow that "grammatically expressed meaning categories do not necessarily have to form maximal contrasts" and that "there may be overlap between terms within the semantic domain" (p.21). It is even possible for a new form to arise with "no new meaning" (p.149).

Persistence: Another problem with the Lewo data is the variable extent to which the lexical postural meaning of the posture verbs is retained as they come to function as grammatical markers. However, semantic retention or survival of this kind does not mean that grammaticisation is not taking place: "Since we are claiming that semantic substance evolves in grammaticisation and that the meaning of the source construction determines the subsequent grammatical meaning, we are not surprised to find that certain more specific semantic nuances of the source construction (or transposition to a measure of derivation) can be retained in certain contexts long after grammaticization has begun" (Bybee et al. 1994:15-16).

Langacker (1990:208) describes this situation from a cognitive grammar perspective. Varying interpretations of the "meanings" of the auxiliary-like forms derived from posture

verbs “merely reflect alternate profiling options”, or variations in “relative prominence of substructures within a conceptualization”, with the result that “variability and even indeterminacy in the translation of locational auxiliary expressions is expected rather than problematic”.

Lehmann (1991:493ff.) has also explored the question of how grammaticisation processes are to be identified at their earliest stages. For him, to say that a variation affecting a linguistic unit is a case of grammaticisation will imply that “the element in question turns from a less grammatical (initially, lexical) element into a more grammatical one”, it “loses substance both on the phonological and the semantic sides”, “its selection restrictions are loosened”, “the freedom to manipulate the element decreases”, “it is integrated into a paradigm”, “it becomes increasingly obligatory in certain constructions”, and “it occupies a fixed (ultimately morphological) position”. Elsewhere, Lehmann (1993:319-320) identifies shrinkage, coalescence, and fixation as three parameters by which these factors can be measured, and indicates that they are to be assessed from paradigmatic and syntagmatic perspectives.

3.3 Lewo posture verbs and paths of development

Besides looking at the synchronic data, there is another way of approaching the question of whether or not grammaticisation has taken place. Grammaticisation theory not only answers the question “given that a form A exists, what is its potential for becoming grammaticalized” (Traugott and Heine 1991:7), but can also predict what the form will become, and how it will get there. For example, at a general level, Traugott and Heine (1991:8-10) state that “for any grammatical domain, there is only a restrictive set of lexical fields, and within them only a restricted set of lexical items, that are likely to become sources”. More particularly, “tense and aspect markers typically derive from specific spatial configurations”, and these new categories of tense and aspect can emerge within a relatively short period, compared, for example, to the development of noun class systems and verbal derivations which can generally be shown to have occurred over a long period of time.

Studies of imperfectives in other languages, and the developments they have undergone, suggest that even though a possible Lewo imperfective construction is still at an early stage of development, the grammaticisation pathway or channel by which it will develop may already be mapped out: “since both present and imperfective meaning include the possibility of describing a situation as progressive, it is plausible to suppose that the more specific progressive grams may undergo development into either a present (in cases where the progressive was restricted to the present) or an imperfective (in cases where no temporal restrictions were in effect). A major step in such a development is the extension of the progressive to express habitual meaning” (Bybee et al. 1994:141ff.). It is interesting to observe that the expression of habitual meaning is already a somewhat marginal use of the progressive aspect function of the posture verbs in Lewo, as is also the case for *stap*, the Bislama analogue of Lewo *su*.

Another difficulty with the suggestion that the posture verb plus durative particle *m̃a* combinations are undergoing grammaticisation is that such a process would result in the usually post-verbal marking of the imperfective category changing to a position before the main verb. This could be seen as a rather dramatic and severe change, particularly in the light of such claims as the “Principle of gradual change in function” (Lichtenberk 1991:38)

and other recognition of grammaticisation as a gradual process. However, it is the existence of the core layer serialisation construction type in Lewo that provides the syntactic framework for aspect marking to develop in the position before the main verb. Each of the steps in the following proposed chain of development are plausible and somewhat trivial, allowing for an overall process of change that is both gradual and incremental.

Table 8: Grammaticisation pathway for a Lewo preverbal imperfective marker or auxiliary

Currently, in simplified form:	VP = V (TA)
and core serialisations are:	SVC = SUB [VP VP] OBJ
With TA category marked on the first verb:	verb core of SVC = [V TA][V]
An instance of this could be:	[V _{posture} TA][V]
but posture meaning may be bleached:	[V _{existential} TA][V]
and existential meaning generalised:	[V _{dummy} TA][V]
The first part may develop into either an auxiliary verb marked for TA, or coalesce into a new TA marker, so that VPs with one main verb result.	either VP = [AUX _{TA} V] or VP = [TA V]

4 Conclusion

It is recognised that some of the tense-aspect markers found in modern Oceanic languages can be shown to reflect earlier Oceanic locational, existential and posture verbs. Also, it is accepted that the perifunctionality of *stap* in the Melanesian pidgins is a measure of the fact that these same kinds of verb types may occur in Oceanic languages with both their basic main verb and secondary aspectual functions intact. However, there do not appear to be detailed descriptions of this actually being the case for a particular Oceanic language.

The Lewo data presented here help to fill this gap, as well as providing an opportunity to evaluate various claims relating to grammaticisation. For example, it has been claimed that “Any grammaticizations that begin with the same or similar source meaning can be expected to follow the same course of change” (Bybee et al. 1994:14), and also, grammaticisation is seen as “the evolution of substance from the more specific to the more general and abstract” (Bybee et al. 1994:13), both in meaning and form, but never in the other direction. The Lewo data discussed here add weight to these views that there is both predictability and non-reversibility in the kinds of grammaticisations that arise from certain lexical sources.

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5 ‘Come’ and ‘go’ in Kilivila

GUNTER SENFT

If one wished to identify the most characteristically verbal of all the verbs...one would turn to the verbs of motion, the verbs that describe how people and things change their places and their orientation in space...

Miller and Johnson-Laird (1976:527)

1 Introduction¹

Although it may seem trivial it is a fact that there are (almost) all kinds of ways in, and paths on, which we can move as human beings – and it is no wonder that our species-specific capacity for speech pays due tribute to this fact. Motion and especially locomotion with respect to ourselves, to other people and to objects are important concepts and constants in, and for, our environment, our lives, and most, if not all, our actions. Thus, motion verbs definitely form a central semantic cluster in our languages. They are central and in general acquired rather early (see e.g. Macrae 1976; Clark and Garnica 1974; Gropen et al. 1991), and they generally play an important part in grammar and grammaticalisation processes, being prime candidates for development into auxiliaries, modals, and poly-verbal chains (see Brown et al 1993).² Moreover, as Miller (1972:338) rightly observes, “we have generalised [the concept of physical motion] freely into nonphysical contexts”, especially with respect to our (verbal) thinking. Thus, it is no wonder that in their classic work on “Language and

¹ This paper is based on 26 months of field research on the Trobriand Islands in 1982/83, 1989, 1992, 1993, 1994, and 1995. I want to thank the German Research Society and the Max-Planck-Society for their support in realising my field research. I also want to thank the National and Provincial Governments in Papua New Guinea and the Institute for PNG Studies for their assistance with, and permission for, my research projects. I express my great gratitude to the people of the Trobriand Islands, especially to the inhabitants of Tauwema; I thank them for their hospitality, friendship, and patient co-operation over all the years. I thank my colleagues in Nijmegen and Bill Palmer for many helpful comments on a first draft of this paper. The Cognitive Anthropology Research Group holds the copyright for the figures presented here.

² For bibliographical information on motion verbs, see for example König-Hartmann and Schweiser (1983); Schreuder-Peters et al. (1992); Slobin (1995).

Perception" Miller and Johnson-Laird (1976:527) refer to motion verbs as "the most characteristically verbal of all the verbs", emphasising (again) that "verbs of motion [are] ontogenetically primary", that "their meanings have a strongly perceptual basis", and that they are "an important link between language and perception". But how are "verbs of motion" to be defined?

Miller and Johnson-Laird (1976:529) point out that we have (at least) to differentiate between "verbs of motion-in-place" and "verbs of locomotion" – and concede that they "arbitrarily confine [their] analysis to verbs of locomotion". However, even with this restriction there remain at least two further problems with the definition of 'motion verbs'. Almost immediately after the definition of verbs of motion as "verbs that describe how an object changes from a place *p* at time *t* to another place *p'* at a later time *t+i*" (1976:528), Miller and Johnson-Laird (1976:530) explicitly refer to one of these problems:

Our attempt to define verbs of motion as verbs that imply change of location is not completely satisfactory, since it leaves us with complicated decisions about various groups of closely related verbs. A list containing all and only verbs of motion seems to be an impossible ideal.

There are a number of (other) attempts and proposals in the linguistic literature to define motion verbs and, more generally, to define how motion events are linguistically coded.³ Almost all these proposals mention as basic components of movement the following notions: 'motion, motion structure, source/origin, path, (intermediate) locations, medium, goal/destination, time, direction/trajectory, figure, ground, manner/cause'. I do not want to discuss these notions in detail here – but I will come back to many of these notions below in my presentation and analysis of some of the Kilivila verbs speakers produce to refer to the locomotion of persons and things.⁴ For the purposes pursued here it should suffice to state that so far we do not have a general notional definition of motion verbs.

Moreover, besides our lack of a clear and general notional definition of "motion verbs" it is rather unclear and highly "questionable whether [a] set of notionally-defined motion verbs corresponds to a formally defined verb class in *any* language", as Wilkins and Hill (1995:242) – referring to Lucy (1994) – point out. Lucy's point can be considered a basic challenge for all research on lexical semantics. He (1994:623-624) argues as follows:

Approaches to lexical semantics often rely on denotational overlap with English words (or their systematised scientific offspring) to establish the meanings and groupings of lexemes in other languages and typically ignore the local facts of morphosyntactic distribution and characteristic denotational range...Lexical items are grouped together and analyzed as a coherent set not because speakers of those languages group them together in a set as revealed, for example, by common grammatical treatment, but because the analyst so groups them. And meanings are assigned not on the basis of a close examination of actual usage, but on the basis of rough functional equivalence with forms in our own language. Thus, an external framework is imposed on the language in place of a framework deriving from its native logic. And any subsequent analysis has more to do with the imposed frame than with the language itself.

³ See for example Diersch (1972:30-52); Fefilov (1976:287); Gerling and Orthen (1979:99ff.); Hilty (1965:26ff.); Maienborn (1990:81, 106); Miller (1972:339); Schröder (1983:213); Di Meola (1994: 28ff.); and especially Talmy (1975, 1985, 1991)

⁴ Kilivila, the language of the Trobriand Islanders, is one of 40 Austronesian languages spoken in the Milne Bay Province of PNG. It is an agglutinative language and its general word order pattern is VOS (Senft 1986).

These two basic problems for all research on motion verbs seem to be rather discouraging for any linguist. However, there may be a way out. I have pointed out at the beginning of this paper that motion and movement are important concepts and thus form a central semantic cluster in human languages. Speakers of every language talk about motion and locomotion events – and to do so their languages offer them the verbal means. Thus, despite the fact that we, so far, do not have a clear definition of motion verbs, we can take it as a fact – until proven otherwise – that we find in all languages notionally defined motion verbs. Moreover, even if we do not know if there are formal criteria within languages on the basis of which their speakers group these verbs as formally defined motion verbs, I assume the common sense argument that all the verbal expressions or verbs speakers use in their languages to refer to motion and locomotion events can be – at least pretheoretically and, of course, notionally – regarded as being motion verbs. Thus, if we speak of 'motion verbs' here we refer to verbal expressions speakers use to verbally refer to motion and locomotion events within the general framework of sensorily perceivable and empirically-given motion and locomotion events speakers experience in their environment. This may sound a rather straightforward argument, and it may be much too common-sense-like for an effete philosophical discussion of problems of formally correct linguistic classification processes, but I think too strict formal requirements sometimes may cause the linguist to disregard obvious facts of life and their coding in natural languages. We should always keep in mind that natural languages are in general ambiguous and do not always follow the strict logic of the algorithms of unambiguous artificial languages designed, for example, for artificial intelligence purposes. This may be regarded by some linguists as a shortcoming or even a deficiency of natural language. However, I am convinced that it is exactly this quality of natural language that accounts for the fact that our languages are such efficient, complex, and highly creative tools in and for our everyday interpersonal interaction and for the human capacity of verbal thinking.

If we accept this notional and, if you like, pretheoretical search domain for, and definition of verbs that refer to motion and locomotion events, it is by no means difficult to find or to collect data for these verbal expressions. Speakers of all languages use them in various contexts and text categories. We can easily elicit them with for example a questionnaire, or if we are looking for more natural contexts in which these verbal expressions are likely to show up, we can elicit the verbs in these predefined contexts.

It is of course necessary for a linguist to come up with a sound semantic description of the verbal expressions that are used by speakers of the described language to refer to (loco-) motion events. However, it is even more interesting to compare these expressions in various languages to find out what concepts of motion exist in a certain language, and what concepts can be found that are similarly expressed in other languages. If we are interested in the latter, and if we are in the rather ideal situation that a number of field researchers are cooperating, being interested in the same problem, then we have to develop means which allow us to compare data that are gathered in comparable contexts.

Our Cognitive Anthropology Research Group at the Max-Planck-Institute for Psycholinguistics offers this quite ideal situation for comparative and interdisciplinary research. Within the Institute's projects on 'Change of State' and on 'Space' (see Pederson & Roelofs 1995) we have discussed and designed two means for eliciting verbal expressions that refer to events of motion and locomotion. David Wilkins and Debbie Hill (1995:216-242) developed a "preliminary 'Come' and 'Go' questionnaire" in which they provide 20 "Motion Scenes" that researchers should use as guidelines for eliciting expressions to refer to locomotion events. We also decided on the elicitation of 'route directions' or 'route

descriptions' because this is a text category in which motion verbs are very likely to show up. However, this decision left us with some problems. It is a quite general experience for field researchers working in rather small speech communities that their attempts to get route descriptions from their consultants provoke results like the following:

- The consultants shake their heads and comment on the request for a route description with comments such as, "You should know by now how to come/go (!) from here to there".
- The consultants look at the researcher in utter disbelief, take him or her by the hand and say something like, "Ok, come on, let's go there, I'll show you the way".
- The consultants – asked to give descriptions of routes that took them to really distant places – start their descriptions and end up with a brief summary like the following which I elicited on the Trobriand Islands in 1983: "I sailed to Dobu Island. I sailed. I anchored at night at the big reef close to Yaga. I sailed another day, anchored at night at the reef close to Dobu. I sailed and arrived at Dobu".

Such route descriptions were not exactly what we had in mind. Moreover, we wanted to elicit comparable texts. Therefore we decided on developing an interactive game in which our consultants were asked to give and to follow route descriptions. In what follows I will describe this methodology of data gathering in detail.

2 Method of data elicitation

Based on an experiment devised by Jürgen Weissenborn (1986) to elicit route descriptions in children within the framework of an interactive game, I did a pilot study on eliciting route descriptions on the Trobriand Islands in 1992 (Senft 1992). In this study I built two identical, rather complex, Lego block 'towns' and used a string to mark a route on one of the models. Then I asked two consultants to play a game with me. In this game the consultants, a matcher and a director, were each facing one of the model towns. The consultants were sitting next to each other, facing the same direction, screened off from one another so that they could not see each other. The director was asked to describe a route to the matcher. This route was indicated by a string on the Lego town in front of the director. On the basis of this description, the matcher was asked to let a small doll walk this route. Unlike Weissenborn's 'towns', my two identical model towns were internally asymmetrical in all axes. It turned out that these models were too complex and abstract for all my Kilivila consultants to interact with successfully.

Based on these pilot experiments David Wilkins and other members of our Cognitive Anthropology Research Group designed a simpler version of this route elicitation task. The Lego blocks were substituted with bigger 'Duplo' blocks as well as 'Easy Block' short cylinders, cones and roof shapes that all had the same colours. Moreover, Duplo fence links and two small identical trucks were introduced to the game; the string to mark the route to be described was replaced by a small link chain; the Lego people were exchanged for slightly bigger Duplo people; and two pieces of white plastic tablecloth material served the base mats for the landscapes that were built with these materials. Finally, two yellow squares were used to mark the start and end points of the paths.

The basic landscape design of this revised version of the route description elicitation task is organised symmetrically around a central axis, with objects on each side of the central axis being of identical shape and colour. This symmetry within the base design should force the

consultants to differentiate directions in the cross axis (or, if you like, the so-called left-right axis). Three pairs of different objects – in the foreground two roof shapes on each side, in the middle ground two simple bridges on each side, and in the back two towers on each side – form the constant objects of the basic scene. Other objects that are symmetrical in one axis – two short fence rails, a truck, a Duplo stair structure, and a rectangular fence structure – can be placed with their axis of symmetry along the central axis. Thus, one way of varying scenes in the landscapes in which routes have to be described is by placing this limited number of symmetrical objects along the axis of symmetry. All these objects were selected to elicit certain notions of motion like ‘going around, circling, going through, going along, going over/under, going up/down, passing through/under, moving to the back/front of, moving on the left/right side of, climbing over’, etc. (for an extremely detailed description of our Research Group’s ‘Route Description Elicitation’ see Danziger 1993:15-28).

There are four basic scenes to be elicited in the modified route description elicitation task. Mixed in with these are three distinct conditions (Danziger 1993:20):

- The first condition is one of pure symmetry in the scenes and applies to the first two routes (see Figures 1 and 2).

The first path starts off to the left and never moves back towards the speaker, but finishes at the other end of the table on the far yellow square.

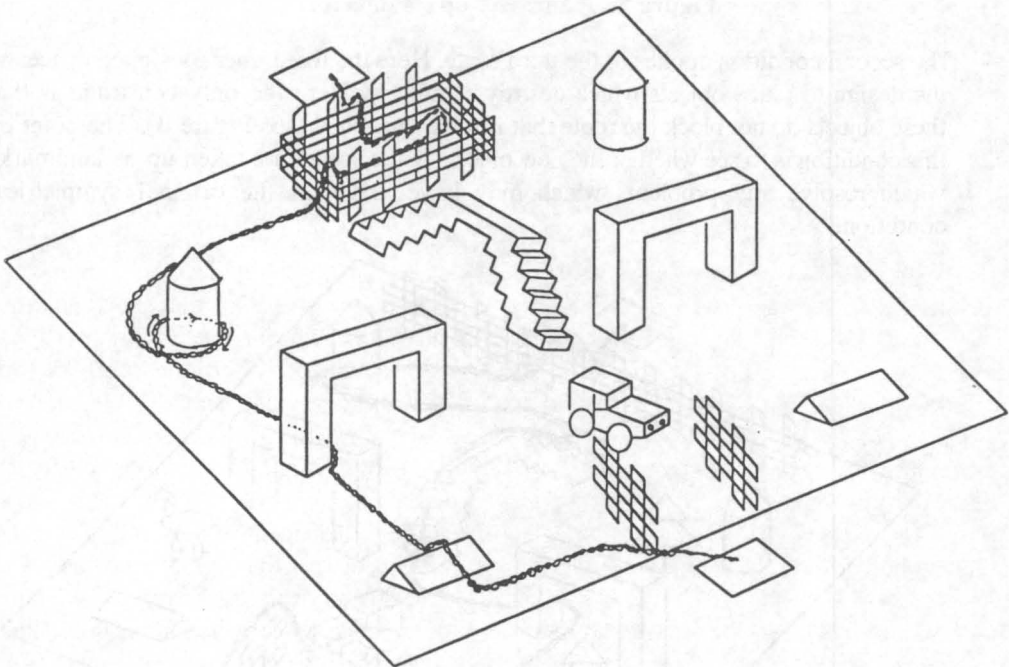


Figure 1: Path 1 (set-up for director)

The second path moves off to the right and is a long return path back to the starting point.

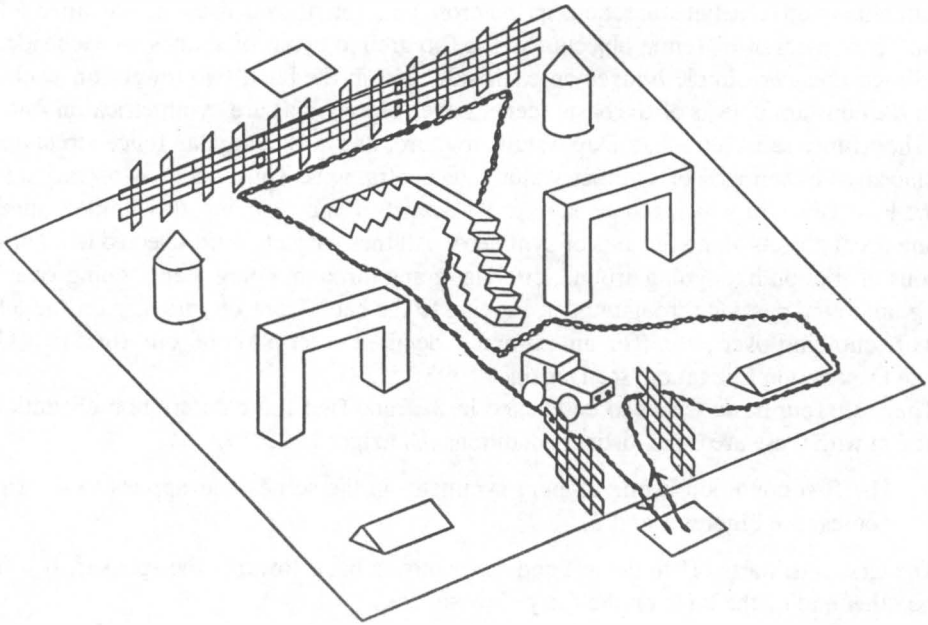


Figure 2: Path 2 (set-up for director)

- The second condition applies to the third route. Here the researcher uses open spaces in the design to place objects which destroy symmetry. Here the only constraint is that these objects do not block the route that is to be described (see Figure 3). The point of this condition is to see whether the new objects in the scenes are taken up as landmarks which resolve any problems which may have arisen in the original symmetrical condition.

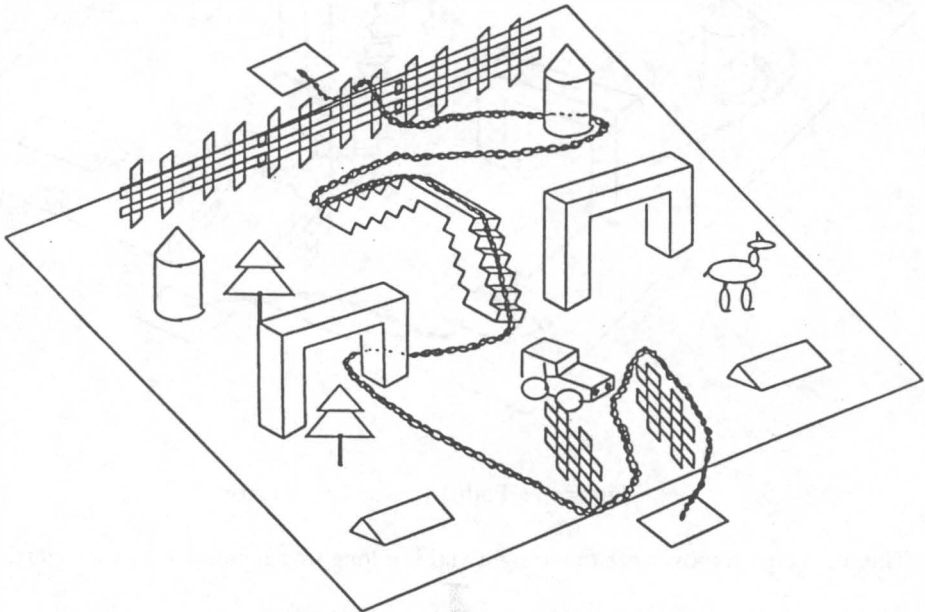


Figure 3: Path 3 (set-up for director)

- The third condition applies to the fourth route (see Figure 4). On either side of the mat, the researcher has to place relatively large objects that are not to be construed as part of the scene itself (like, for example, a coconut or an apple to the left of each mat and a bush knife or a bowl to the right). The point of this condition is to see whether ad hoc local landmarks – basically outside the scene – will be used to facilitate the route description.

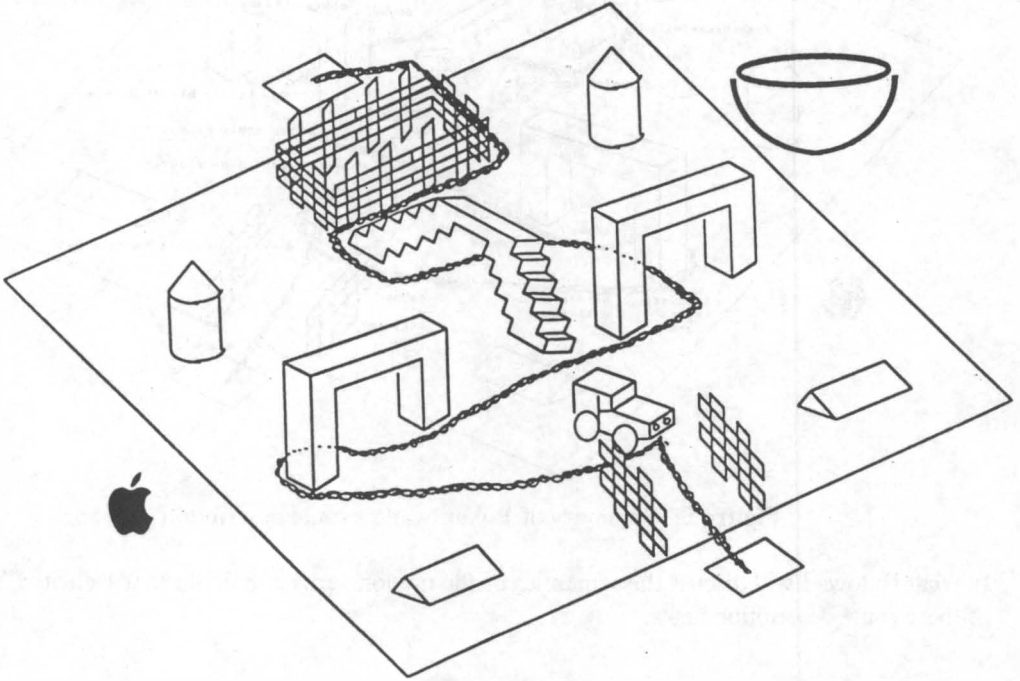


Figure 4: Path 4 (set-up for director)

These four routes were used to elicit route descriptions within the framework of the above described interactive game played by the director and the matcher. The descriptions of these four different, though standardised, paths were videotaped with three pairs of male and female adult players each. After transcription of the data which I collected in 1994 the documented motion verbs were discussed with additional consultants to get further information on the lexical semantics of the respective verbal expressions. Figure 5 gives a brief summary of how Bokarawana (approx. 35 years old) described Path 4 to her younger neighbour Imkubul. (In the appendix I give the complete transcription of this interactive game.)

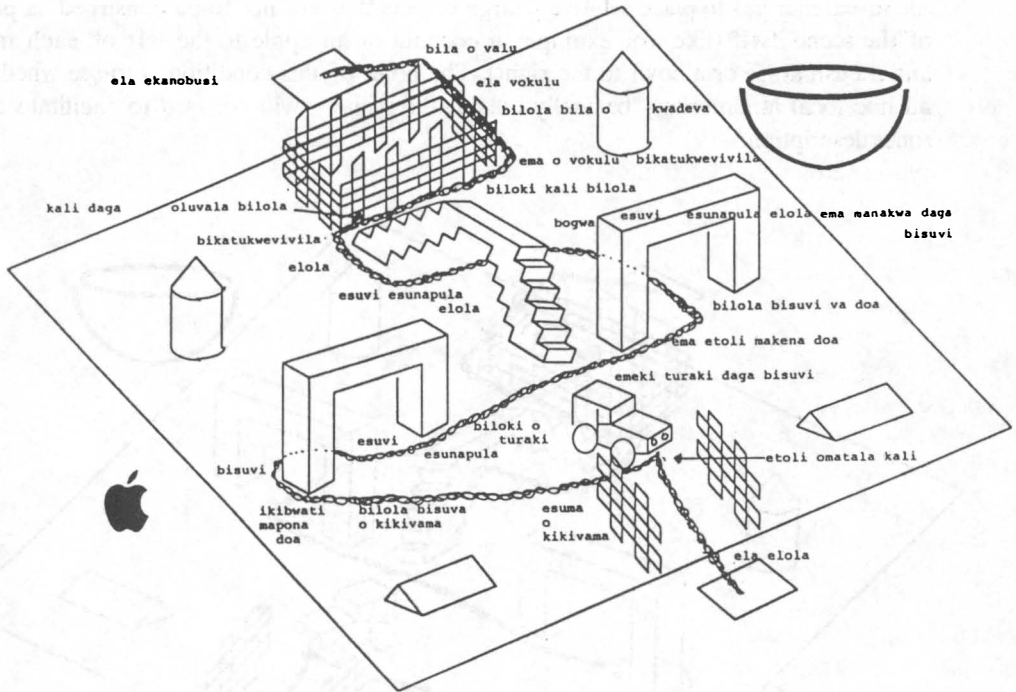


Figure 5: Summary of Bokarawana's route description

In what follows I will discuss the semantics of the motion verbs in Kilivila that I elicited in 12 of these route description tasks.

3 'Come' and 'go' in Kilivila

3.1 Criteria and presentation format

Discussing the motion verbs elicited in these interactive games with additional consultants, it became obvious that the following criteria were basic for the differentiation of these motion verbs, and thus also central for an adequate lexical semantic description of these Kilivila verbal expressions:⁵

- Is the source and/or path and/or destination of the motion known or not?
- Is the motion oriented towards, or away from, the speaker?
- Is the motion deictically anchored in the speaker?
- Is the place of the speaker at the destination of the motion or not?
- Is the destination of the motion a place or person other than the speaker and her/his place?

⁵ Most of these criteria nicely coincide with Talmy's (1975) definition of the "MOTION SITUATION" with its central subconcepts of "FIGURE, GROUND, PATH", and "MOTION". See also Talmy (1991) and Aske (1989).

- Does the motion include the commencement or completion of the motion?
- What kinds of other notions such as 'to go down to the beach', 'to go up to the village', etc. are expressed in Kilivila motion verbs?

In what follows I will present what I will (pre-theoretically) call the 'come/go' subset of these "inherently directed" (Levin & Rappaport Hovav 1995:111; also 147, 241ff.) Kilivila (loco-)motion verbs elicited within the interactive games. My analyses are based on these data and on discussions of expressions that refer to motion events I had with additional consultants. Thus, these lexical semantic descriptions represent analyses based on the Kilivila native speakers' emic point of view.

I first present the Kilivila verbal expression the speakers used to refer to a certain motion event, describe the lexical semantics of this verbal expression, and then illustrate the lexical semantic analysis with a figure.⁶ For these illustrations I basically use the conventions proposed by Wilkins and Hill (1995): The speaker is represented by a circle (o). If the motion is not deictically anchored in the speaker, the source *S* of the described motion is indicated by a black dot. Such a black dot is also used to indicate an implied destination *D* (or goal) of the motion event the expression refers to. An arrow is used to indicate the path *P* (or trajectory) of the motion. If the actual path is not specified, this is indicated by a question mark (?) in the arrow. The pointed head of the arrow represents the general direction of the motion referred to. Whether or not any information on the source *S*, the path *P*, and the destination *D* are part of the lexical semantics of a given motion verb is indicated by plus (+) and/or minus (-) signs given with the respective abbreviations. Other more specific information is added to the illustrations if necessary.

3.2 Motion away from the speaker

We will first look at verbal expressions that codify motion that is directed away from the speaker. The verbal expression *-la*⁷ is used to refer to all kinds of motion events that are directed away from the speaker. This implies, of course, that the place of the speaker is not at the destination of the motion. The motion event itself can, but need not, be deictically anchored in the speaker. Source, path, and destination of the motion may or may not be known. We can gloss this motion verb as 'to go'. The expression *-lola*-, a reduplication of *-la*-, emphasises and intensifies the motion referred to. This expression is also used to refer to the motion event that can be glossed as 'to go' as well as 'to walk'. Figure 6 illustrates the analysis of these motion verbs:

⁶ The abbreviations and symbols used in figures and discussion are presented in this paragraph. Additional abbreviations for glosses used in examples and the appendix are in footnote 10.

⁷ For the orthography of the Kilivila expressions presented here see Senft (1986:14ff.). For the construction of the Kilivila verbal expression and its inflectional morphology see Senft (1986:29-38); see also the morpheme-interlinear translation of the route description game in the appendix.

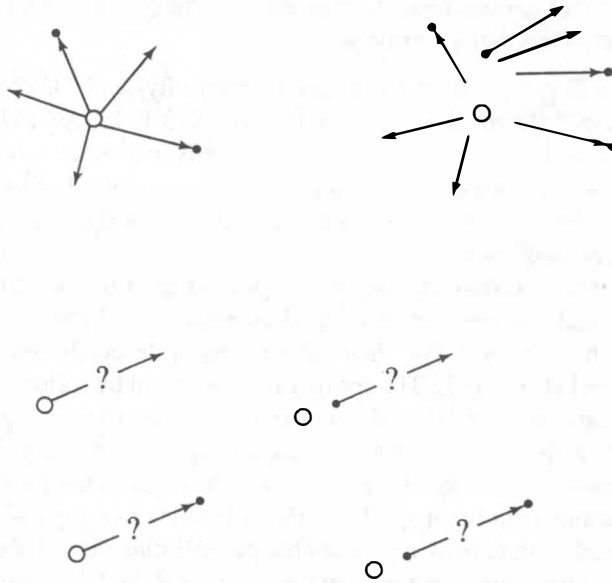


Figure 6: *-la* (*lola* = Emph/Int) motion away from speaker
 $\pm S \pm P \pm D$

The verbal expression *-lilola-* is used to refer to any kind of motion away from the speaker. This expression implies that the speaker has no knowledge whatsoever about the source, path, and destination of the motion. The only information conveyed besides the general fact that the motion is by no means directed towards the speaker is the fact that this motion is habitual. This expression can be glossed as ‘to (always) go/walk’ Figure 7 illustrates this lexical semantic analysis of the motion verb:

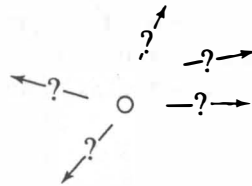


Figure 7: *-lilola-* motion in general away from speaker
 $\pm S \pm P \pm D$

The verbal expression *-valova-* is used to refer to motion away from speaker. The focus of this expression is on the start of the motion event. The source is known to the speaker. The motion event the speaker refers to can, but need not, be deictically anchored in the speaker. Information about the path and the destination of the motion may or may not be known to the speaker. The expression can be glossed as ‘to start going/walking’. Figure 8 illustrates this analysis:

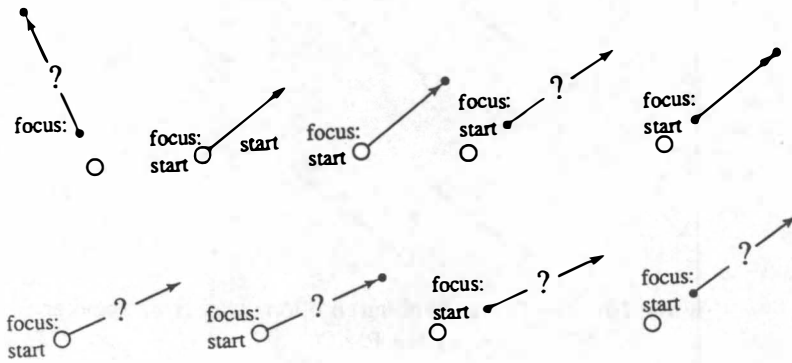


Figure 8: *-valova-* motion away from speaker
+ S ± P ± D

The verbal expression *-loki-* also refers to motion away from the speaker. The focus of this expression is on the completion of the motion, or the arrival of the object or person moving away from the speaker. It implies that the action of the motion away from the speaker is completed and that the destination of the motion is known. The motion event the speaker refers to can, but need not, be deictically anchored in the speaker. Information about the source and the path of the motion may or may not be known to the speaker. The expression can be glossed as 'to go/walk and arrive (at a known destination)'. Figure 9 illustrates this analysis:

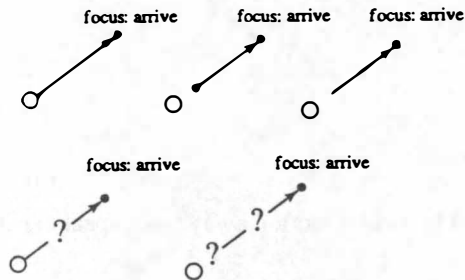


Figure 9: *-loki-* motion away from speaker
± S ± P + D

The verbal expression *-va-* refers to motion away from the speaker. This expression is telic, it implies that the destination of the motion is known. The motion event the speaker refers to can, but need not, be deictically anchored in the speaker. Information about the source and the path of the motion may or may not be known to the speaker. The expression can be glossed as 'to go to'. The expression *-weva-*, probably a reduplication of *-va-*, implies that the motion is habitual and recurrent; it can be glossed as 'to always go to'. Figure 10 illustrates this analysis:

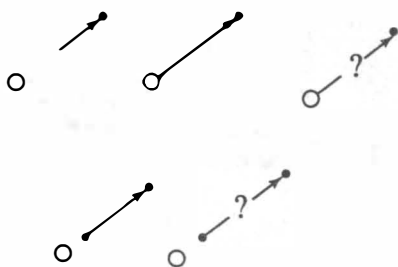
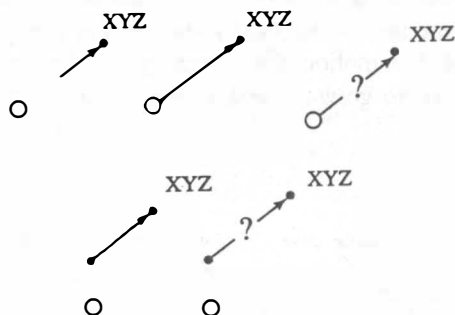


Figure 10: *-va-* (*weva*: habitual) motion away from speaker
 $\pm S \pm P + D$

The verbal expression *-weki-* refers to a *swift* motion away from the speaker. Again, this expression is telic, however its usage also requires the specification of the destination of the motion event. The motion event the speaker refers to can, but need not, be deictically anchored in the speaker. Information about the source and the path of the motion may or may not be known to the speaker. The expression can be glossed as ‘to go and rush to (place XYZ)’. Figure 11 illustrates this analysis:



Swift Motion

Figure 11: *-weki-* motion away from speaker, D specified
 $\pm S \pm P + D$

The verbal expression *-vokeya-PP IV-* belongs to a set of the verbs that allow the incorporation of an object directly into the verbal expression, if the object is referred to by a pronoun. This is done by suffixing possessive pronominal affixes that indicate inalienable possession and in general an intimate degree of possession. In my Kilivila grammar I have referred to this set of pronouns as the fourth series of possessive pronouns within the language; therefore, I refer to these affixes with the abbreviation ‘PP IV’ (Senft 1986:33-35, 47-54). This expression is used to refer to motion away from the speaker or from another person or persons who are known to, and specified by, the speaker.⁸ The motion event the

⁸ Compare for example:

E-vokeya-gu.
 3-go.away.from-1PP IV
 ‘He goes away from me.’

E-vokeya-mi.
 3-go.away.from-2PL.PP IV
 ‘She goes away from you (all).’

speaker refers to can, but need not, be deictically anchored in the speaker. Information about the path and the destination of the motion may or may not be known to the speaker. The expression can be glossed as 'to go away from the speaker or from someone else'. Figure 12 illustrates this analysis:

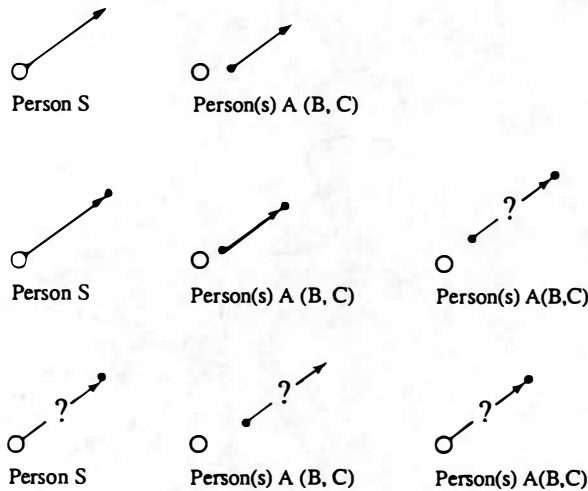


Figure 12: *-vokeya-* PPIV motion away from speaker or from (an)other person(s)
+ S \pm P \pm D

The verbal expression *-vekeya-* refers to motion away from the speaker. The expression is telic again, because it implies the speaker's knowledge of the destination of the motion event. Moreover, this expression implies that a person and/or animal is following another person and/or animal. The motion event the speaker refers to can, but need not, be deictically anchored in the speaker. Information about the source and the path of the motion may or may not be known to the speaker. The expression can be glossed as 'to go to – following a person or an animal'. Figure 13 illustrates this analysis:

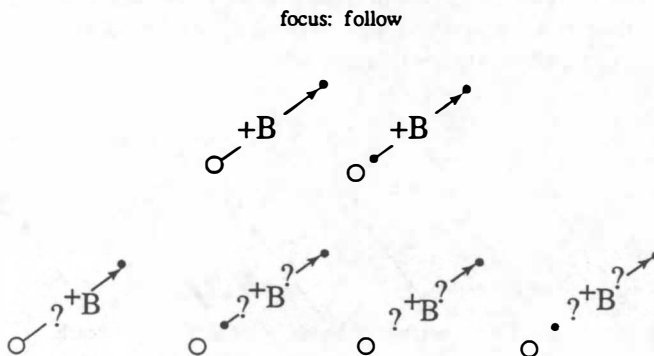


Figure 13: *-vekeya-* motion away from speaker
 \pm S \pm P + D

The verbal expression *-suva-* refers to motion away from the speaker. The expression is telic, too, because it implies the speaker's knowledge of the destination of the motion event. Moreover, this expression also implies knowledge of the path. The source of the motion event may or may not be known. The motion event the speaker refers to can, but need not, be deictically anchored in the speaker. The expression can be glossed as 'to go via'. Figure 14 illustrates this analysis:

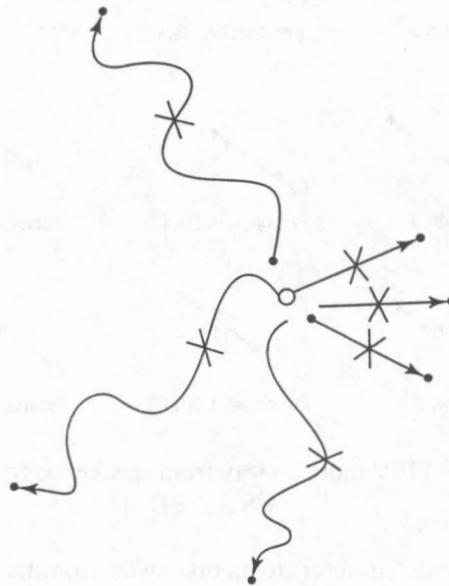


Figure 14: *-suva-* motion away from speaker $\pm S + P + D$

The verbal expression *-vabusi-* refers to motion away from the speaker. The expression is not only telic, it also implies that the destination of the motion is on the trajectory from the village or the garden down to the beach. The motion event the speaker refers to can, but need not, be deictically anchored in the speaker. More specific information about the source and any information about the path of the motion may or may not be known to the speaker. The expression can be glossed as 'to go (on the trajectory that leads) from the village/garden down to the beach'. Figure 15 illustrates this analysis:

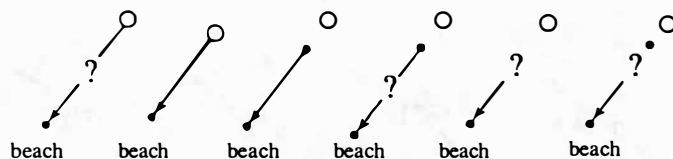


Figure 15: *-vabusi-* motion from village/garden **down** to beach
motion away from speaker
 $\pm S \pm P + D$

The verbal expression *-valagua-* refers to motion away from the speaker. Again, this expression is not only telic, it also implies that the destination of the motion is on the trajectory from the beach up to the village. The motion event the speaker refers to can, but need not, be deictically anchored in the speaker. More specific information about the source and any information about the path of the motion may or may not be known to the speaker. The expression can be glossed as 'to go (on the trajectory that leads) from the beach up to the village'. Figure 16 illustrates this analysis:

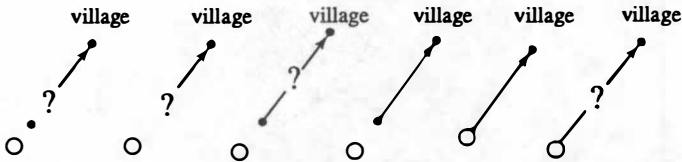


Figure 16: *-valagua-* motion from beach **up** to the village
motion away from speaker
 $\pm S \pm P + D$

3.3 Motion towards the speaker

We will now look at verbal expressions that codify motion towards the speaker. The verbal expression *-ma-* is used by speakers to refer to motion towards the speaker. Source, path, and destination of the motion may or may not be known to the speaker. The speaker's place may or may not be at the destination of the motion referred to. The expression can be glossed as 'to come'. Figure 17 illustrates this analysis:

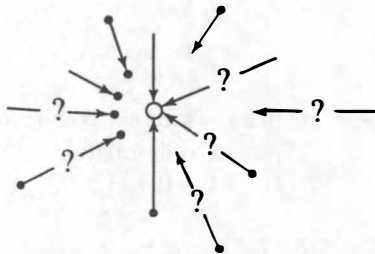


Figure 17: *-ma-* motion towards speaker
 $\pm S \pm P \pm D$

The verbal expression *-mema-*, most probably a reduplication of the form *-ma-*, refers to motion towards the speaker. This expression is telic, it implies that the destination of the motion is either the speaker or another person. Nevertheless, this implies again that the speaker may or may not be at the destination of the motion event. The source and the path of the motion may or may not be known to the speaker. The expression can be glossed as 'to come to'. Figure 18 illustrates this analysis:

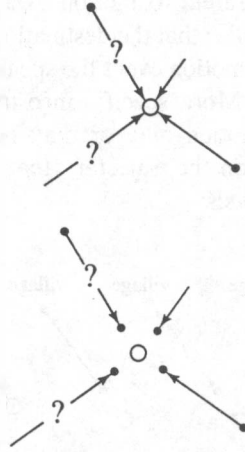


Figure 18: *-mema-* motion towards speaker
D is speaker or other person
 $\pm S \pm P + D$

The verbal expression *-mekeya-* refers to motion towards the speaker. The expression is telic, the speaker has to be at the destination of this motion event. Moreover, this expression implies that someone accompanies another person and/or animal that moves towards the speaker. The source and the path of the motion may or may not be known to the speaker. The expression can be glossed as ‘to come with someone (or with an animal) to where the speaker is’. Figure 19 illustrates this analysis:

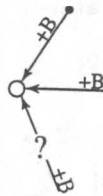


Figure 19: *-mekeya-* motion towards speaker accompanying someone
Speaker at destination
 $\pm S \pm P + D$

The verbal expression *-mikeya-PP IV-* again belongs to the set of the verbs that allow the incorporation of an object directly into the verbal expression, if the object is referred to by a pronoun. This is done by suffixing possessive pronominal affixes that indicate inalienable possession and a generally intimate degree of possession.⁹ The verb refers to motion towards the speaker. The expression is telic, the speaker has to be at the destination of the motion or in

⁹ Compare for example:
E-mikeya-m.
3-come.towards-2PP IV
‘She comes to(wards) you.’

Ku-mikeya-si-si.
2-come.towards-3PL.PP IV-PL
‘You (all) come to them.’

close contact to another specified person who is the destination of this motion event. The source and the path of the motion may or may not be known to the speaker. The expression can be glossed as 'to come towards (the speaker or to a person who is close to where the speaker is)'. Figure 20 illustrates this analysis:

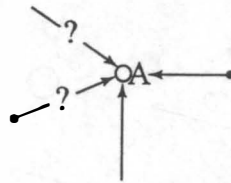


Figure 20: *-mikeya-* PPIV to come towards someone:
ps specified or speaker
 $\pm S \pm P + D$

The verbal expression *-suma-* refers to motion towards the speaker. This expression implies knowledge of at least that part of the path that is in the field of the speaker's vision and/or perception; moreover, it implies that this part of the path passes someone or something close to the speaker. The source and the destination of the motion may or may not be known to the speaker. The expression can be glossed as 'to come and pass something/someone close to the speaker'. Figure 21 illustrates this analysis:

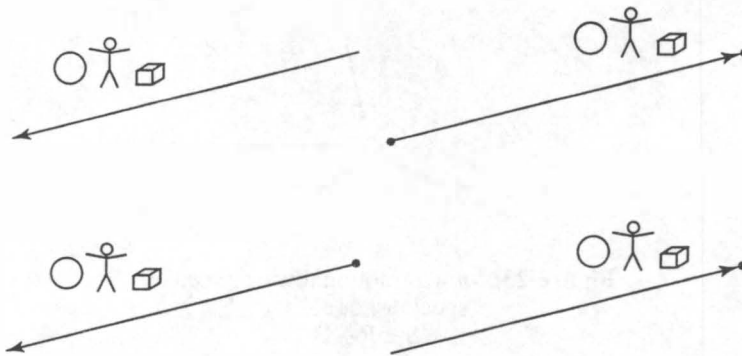


Figure 21: *-suma-* motion towards speaker
 $\pm S + P^* \pm D$

* part of the path in the field of the speaker's vision; path passes s.o./s.th. close to the speaker

The verbal expression *-sumwa-* refers to motion towards the speaker. This expression implies knowledge of at least that part of the path that is in the field of the speaker's vision and/or perception; moreover, it implies that this part of the path passes someone or something further away from the speaker. The source and the destination of the motion may or may not be known to the speaker. The expression can be glossed as 'to come and pass something/ someone further away from the speaker'. Figure 22 illustrates this analysis:

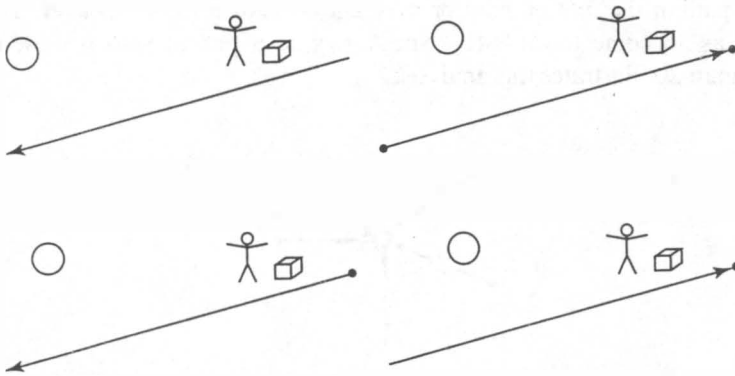


Figure 22: *-sumwa-* motion towards speaker
 $\pm S + P^* \pm D$

*part of the path in the field of the speaker's vision;
 path passes s.o./s.th. further away from the speaker

The verbal expression *-mwa-* refers to motion towards the speaker. The expression is telic, the destination of the motion event is known to the speaker, though the speaker must not be at the destination point of this motion event. The source and the path of the motion may or may not be known to the speaker. The expression can be glossed as 'to come to (a place which is in the direction of, but different from, the speaker's place)'. Figure 23 illustrates this analysis:

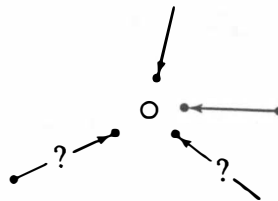


Figure 23: *-mwa-* motion towards speaker
 speaker not at D
 $\pm S \pm P + D$

The verbal expression *-mweki-* refers to motion towards the speaker. Again the expression is telic, and again the destination of the motion event is known to the speaker, though the speaker must not be at the destination point of this motion event. Moreover, the speaker knows that the motion takes the straight and direct path from a source which he may or may not know about, towards the destination of the motion event. The expression can be glossed as 'to come straight to (a place which is in the direction of, but different from, the speaker's place)'. Figure 24 illustrates this analysis:

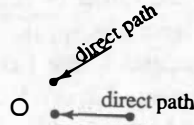


Figure 24: *-mweki-* motion towards speaker
speaker not at D
 $\pm S + P + D$

The verbal expression *-meki-* refers to motion towards the speaker. Again the expression is telic; the destination is not only known to the speaker, but it is also specified as another person or object. The source and the path of the motion may or may not be known to the speaker. The expression can be glossed as 'to come to someone/something (who/which is in the direction of where the speaker is, but at a different place)'. Figure 25 illustrates this analysis:

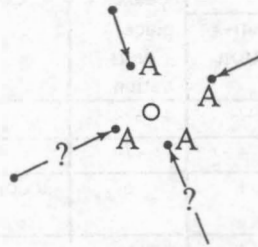


Figure 25: *-meki-* motion towards speaker
speaker not at D
D specified as other person/thing
 $\pm S \pm P + D$

The verbal expression *-mwemwa-* refers to motion towards the speaker. The expression is telic; the destination is not only known to the speaker but also specified; however, the speaker must not be at the destination of this motion event. The source and the path of the motion may or may not be known to the speaker. The expression can be glossed as 'to come to (a specified place which is different from the speaker's place)'. Figure 26 illustrates this analysis:

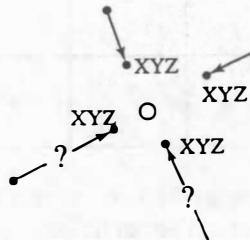


Figure 26: *-mwemwa-* motion towards speaker
speaker not at D
D specified as other place
 $\pm S \pm P + D$

These verbal expressions represent the subset of Kilivila (loco-)motion verbs that express the concepts 'motion directed away from the speaker' – the 'GO'-concepts – and 'motion towards the speaker' – the 'COME' concepts – that I could elicit from my consultants in the Trobriand Islands and which are documented in my Kilivila speech corpora. In what follows I will summarise the findings presented here.

4 Summary

If we look at all the Kilivila verbal expressions that express 'COME' and 'GO' concepts, we realise that the Trobriand Islanders have developed a rather sophisticated system for referring to various motion events that are in the broadest sense directed towards or away from the speaker. Table 1 summarises the Kilivila verbs expressing 'COME' concepts:

Table 1: 'COME' – Kilivila motion verbs expressing motion towards the speaker

Verb	± known			Speaker's place ± desti- nation	Comments	Gloss(es)
	Source	Path	Desti- nation			
<i>-ma-</i>	+/-	+/-	+/-	+/-		'to come'
<i>-mema-</i>	+/-	+/-	+	+/-		'to come to'
<i>-mekeya-</i>	+/-	+/-	+	+	accompany	'to come with someone'
<i>-mikeya- PPIV</i>	+/-	+/-	+	+		'to come towards'
<i>-mwa-</i>	+/-	+/-	+	-		'to come'
<i>-mweki-</i>	+/-	+	+	-	direct path	'to come straight to'
<i>-meki-</i>	+/-	+/-	+	-	Destination person other than speaker	'to come to s.o./ s.th.'
<i>-mwemwa-</i>	+/-	+/-	+	-	Destination place other than speaker's place	'to come to a place different from speakers place'
<i>-suma-</i>	+/-	+	+/-	-		'to come and pass s.o./s.th. close to the speaker'
<i>-sumwa-</i>	+/-	+	+/-	-		'to come and pass s.o./s.th. further away'

As already mentioned in the beginning of §3 above, this table confirms that the following criteria are central for an adequate lexical semantic description of Kilivila verbs expressing motion towards the speaker. Only the most general expression *-ma-* does not differentiate at all whether the speaker knows something about the source (S), the path (P), and the direction (D) of the motion event and the speaker's position or place (Sp's P) with respect to this motion event. In general, any kind of knowledge about the source of the motion event is not

explicitly expressed in all these verbs, it is irrelevant whether the speaker knows or does not know anything about the place from where the motion event starts.

The three verbal expressions *-mweki-*, *-suma-* and *-sumwa-* imply that the speaker knows something about the path of the motion or certain parts of the this path. Moreover, seven of these ten motion verbs clearly indicate that the motion event they refer to is telic; their use implies that speaker has information about the destination of the motion events to which they refer. In addition to this encoded information the expressions *-mekeya-* and *-mikeya-PP IV-* imply that the speaker's place is at the destination of the motion event. With the exception of the expressions *-ma-* and *-mema-* that do not encode any such information, all the other six verbs imply that the speaker using these forms to refer to a motion event is not at its destination.

Table 2 summarises the Kilivila verbs expressing 'GO' concepts:

Table 2: 'GO' – Kilivila motion verbs expressing motion away from the speaker

Verb	± known			Comments	Gloss(es)
	Source	Path	Destination		
<i>-la-</i>	+/-	+/-	+/-		'to go'
<i>-lola-</i>	+/-	+/-	+/-	Intensification; Emphasis	'to go', 'to walk'
<i>-lilola-</i>	+/-	+/-	+/-	Intensification; Emphasis; Habitual	'to go', 'to walk'
<i>-valova-</i>	+	+/-	+/-	action starts	'to start going/ walking'
<i>-vokeya-</i> PPIV	+	+/-	+/-		'to go away from someone'
<i>-loki-</i>	+/-	+/-	+	action complete	'to go/walk and arrive'
<i>-va-</i>	+/-	+/-	+		'to go to'
<i>-weva-</i>	+/-	+/-	+	Habitual	'to go to'
<i>-weki-</i>	+/-	+/-	+	swift action; Destination specified	'to go and rush to'
<i>-vekeya-</i>	+/-	+/-	+	follow (+animate)	'to go and follow'
<i>-suva-</i>	+/-	+	+		'to go via'
<i>-vabusi-</i>	+/-	+/-	+		'to go down to the beach'
<i>-valagua-</i>	+/-	+/-	+		'to go up to the village'

This table shows that two of the 13 verbs expressing motion away from the speaker, namely *-valova-* and *-vokeya-* imply that the source of the motion event is known to the

speaker. Only the verb *-suva-* implies that the speaker knows something about the path of the motion or certain parts of this path. With nine of these expressions it is codified that speaker knows something about the destination of the motion events they refer to – one of these expressions, the verb *-weki-*, actually requires that the destination of the swift motion event to which it refers is specified. Thus, all these expressions are telic.

If we compare these tables it is also obvious that most of the 'COME' concepts do not match with the 'GO' concepts. I have no idea whatsoever why this is so. We just have to observe the interesting fact that specific kinds of information codified in verbs expressing 'COME' concepts differ from specific kinds of information that are codified in verbs expressing 'GO' concepts.

Finally, I want to point out that motion verbs in Kilivila are very often realised in serial verb constructions. Even a brief glance at the appendix strongly supports this observation. These constructions also allow for different glosses of certain verbal expressions. To give just one example: The verb *-ke'ita-* can generally be glossed as 'to return'. However, constructions like:

- (1)a. *e-la e-ke'ita*
3-go 3-return
b. *e-ma e-ke'ita*
3-come 3-return¹⁰

are best glossed as 'to go back' and 'to come back'. In serial verb constructions we also observe that speakers suddenly change their point of view of description within these constructions. Bokarawana provides a nice example in her description of route number 4 (see Appendix, utterance No.43) where she serialises the 'GO'-expression *-lola* with the 'COME'-verb *-ma-*:

- (2) *E-lola e-ma ma-na-kwa daga...*
3-go 3-come DEM-DEM-CP.thing ladder
He goes and comes (to) this ladder...

However, this is not an 'exotic' finding at all. We also find many descriptions in English and German that play with this kind of alternation between 'come' and 'go' in phrases like, for example, 'X goes on and comes to Y'.

¹⁰ Abbreviations used here and in the appendix:

CP	Classificatory Particle (numeral classifier)
DEM	Demonstrative
DIR	Directional
EMPH	Emphasis
FUT	Future
LOC	Locative
PL	Plural

Appendix 1: Text for route: path 4 (see Figure 5)

Participants

Director: Bokarawana (B) (Malasi, approx. 35 years)
 Matcher: Imkubul (I) (Malasi, approx. 24 years)
 Observer: Gunter Senft (G)
 Public voices (P)

Text

1. B: *E Imkubul?*
 yes Imkubul
 'Yes, Imkubul?'
2. I: *O.*
 oh
 Oh!
3. B: *M-to-na tau bogwa bi-lola* (laughs) *e-lola e-la*
 DEM-CP.male-DEM man already 3.FUT-go 3-go 3-go
 'This man, he will already go, he really goes, he goes,
e-toli mna omatala m beya avaka...
 3-stand.still hm in.front.of hm this what...
 he stands (still) comes to a halt in front of, hm, this, what is this...?'
4. P: *...kali...*
 fence
 '...fence...'
5. B: *...kali e-toli iga i-wevasi e bogwa*
 fence 3-stand.still then 3-rest yes ok
 ...fence, he stops, then he rests..., well, ok?'
6. I: *E.*
 yes
 'Yes.'
7. B: *E besatuta bi-lola bogwa e-lilola i-lola e*
 and now 3FUT-goal already 3-go 3-go and
 'And now he will really go, already he really keeps on going, he goes, and
e-va e-toli ma-ke-si-na makala
 3-go.to 3-stand.still DEM-CP.rigid-PL-DEM like
 he goes to, and stops at these rigid (things) – like
kokola doa beya e-toli ma-luva-na
 pillar door this 3-stand.still DEM-CP.tied.bundle-DEM
 pillars of a door, there he stops at this tied bundle (of things – i.e. the Lego
 construction),

e-mema e-seki-la e i-vavagi e iga i-wevasi...
 3-come 3-pass-EMPH and 3-make and then 3-rest
 he comes there, he really passes it, he makes it; and then he rests.'

8. I: *Ke owewa kena omema?*
 well there.(away from me) or here.(closer to me)
 'Well, (at the side that is) there (further away from me) or (at the side that is) here (closer to me)?'
9. B: *E-suma o kikivama m-to-na tau...*
 3-come.and.pass s.th.(close.to.speaker) LOC left DEM-CP.male-DEM man
 'He comes and passes it here (close to me and you), (it is) at the left of this man,
e ke bogwa?
 yes well ok
 yes, well, ok?
10. I: *E.*
 yes
 'Yes.'
11. B: *E bi-lola bi-lola bi-suva m-pa-na*
 and 3.FUT-go 3.FUT-go 3.FUT-go.via DEM-CP.part-DEM
 'And he will really go, he will really go, he will go via this part
owewa o kikivama va Tuyabwau
 there LOC left DIR Tuyabwau
 there at the left, to the Tuyabwau (the name of a fresh water well)
e-vekeya e e-suma-wa ku-vagi yokwa
 3-go.and.follow and 3-come.and.pass-only 2-do you
ma-ke-na kai
 DEM-CP.wood-DEM tree
 he goes and follows (this direction); and he comes and passes by –
 you do (put up) this tree -
e i-toli igau i-kibwati ma-pona-na doa iga i-wevasi
 and 3-stand.still then 3-be.in.line.with DEM-CP.hole-DEM door then 3-rest
 and he stops, then he is in line with this door, and then he rests.'
12. I: *E bogwa.*
 yes ok
 'Yes, ok.'
13. B: *Bogwa ke bogwa bogwa*
 ok well ok ok
 'Ok, well, ok...ok?'
14. I: *E.*
 yes
 'Yes.'

15. B: *E bi-suvi bogwa e-suvi*
and 3.FUT-enter already 3-enter
'And he will enter (and pass through), already he enters (and passes through the door).
e e-suvi e-sunapula e-lola e e-lola-aa
yes 3-enter 3-exit 3-go yes 3-go-EMPH
Yes, he enters (passes through and) exits (leaves it), he really goes, he keeps on going, indeed,
e-ma e-meki turaki avaka ma-utu-na?
3-come 3-come.to truck what DEM-CP.fragment-DEM
he comes, he comes to the truck – what about these particles?
e-toli i-wevasi, ...bogwa ke bogwa Imkubul?
3-stand.still 3-rest ok well ok Imkubul
he stops, he rests; ok, well, ok Imkubul?
16. I: *Igau ke e-suvi e-la i-toli oluvala....?*
later well 3-enter 3-go 3-stand.still in.the.middle
'Wait; well, he enters (and passes through the door), he goes, he stops in the middle...?'
17. B: *E e-suvi e-sunapula i-lola*
yes 3-enter 3-exit 3-go
'Yes, he enters (and passes through), he exits (leaves), he really goes,
bi-loki o turaki mbeya avaka Gunter?
3.FUT-go.and.arrive LOC truck there what Gunter
he will go and arrive at the truck there (at) what (is this), Gunter?'
18. G: *Makala daga.*
like ladder
'It's like a ladder.'
19. B: *O ke, e-meki turaki daga e-toli iga*
oh well 3-come.to truck ladder 3-stand.still then
'Oh, well; he comes to the truck and the ladder, he stops, then
i-wevasi, ma-ke-na i-sedidi...
3-rest DEM-CP.wooden-DEM 3-slip
he rests; this slips...'
20. G: *Imkubul ambe? Ku-nigada kidamwa gala ku-nukwali.*
Imkubul where 2-ask.for if not 2-know
'Imkubul, where (is the man now)? – ask if you do not know.'¹¹
21. B: *E-livala buku-nigada buku-katupoi e yegu ba-livala*
3-say 2.FUT-ask.for 2.FUT-ask and I 1.FUT-say
'He says you will ask for something (meaning) you will ask and I will answer.'

¹¹ Here I chose an inappropriate expression: *-nigada-* means 'to ask for something, to demand, to request' – my mistake is elegantly corrected by Bokarawana.

22. I: *Igau sena e-kapusi m-to-na tau*
 later very 3-fall DEM-CP.male-DEM man
 'Wait, he is always falling down this (little) man.'
23. B: *Ke bogwa Imkubul?*
 well ok Imkubul
 'Well, ok Imkubul?'
24. I: *E.*
 yes
 'Yes.'
25. G: *Ambe e-tota besatuta?*
 where 3-stand now
 'Where is he standing now?'
26. I: *Kena ambe? (laughs) m-to-na tau e-la i-tova*
 but where DEM-CP.male-DEM man 3-go 3-stand
 'But where (indeed)? – this man goes, he is standing on his way,
o mna ka turaki daga oluvala?
 oh hm look truck ladder in.the.middle
 o, hm, look, in between the truck and the ladder.'
27. B: *Turaki daga oluvala-ga e-tota m-to-na tau.*
 truck ladder in.the.middle-EMPH 3-stand DEM-CP.male-DEM man
 'Between the truck and the ladder, in the middle, indeed, this man is standing (there).'
28. G: *E bwena makala.*
 yes good like
 'Yes, it is good like this.'
29. B: *E ke bogwa?*
 and well ok
 And, well, ok?
30. I: *E.*
 yes
 'Yes.'
31. B: *E besatuta bi-lola bi-suvi turaki daga*
 and now 3.FUT-go 3.FUT-enter truck ladder
 'And now he will go and enter (and pass through the passage) between the truck and the ladder,
bi-suvi-ga oluvala e bi-lola e besatuta e-lola,
 3.FUT-enter-EMPH in.the.middle and 3.FUT-go and now 3-go
 he will really enter (and pass) in the middle, and he will go, and now he is going
e e-lola e-ma e-toli ma-ke-na avaka...
 and 3-go 3-come 3-stand.still DEM-CP.rigid-DEM what
 and he really goes, he comes and stops at this – what is it?...'

32. G: *Makala doa*
like door
'It's like a door.'
33. B: ...*doa, e-toli-ga m-pa-na e-mema e-wevasi...*
door 3-stand.still-EMPH DEM-CP.part-DEM 3-come.to 3-rest
'...door; he stops at this thing, he comes to it and rests.'
34. I: *Ke bogwa e-toli e-wevasi?*
well already 3-stand.still 3-rest
'Well, he has already stopped and rests?'
35. B: *E iga e-tota e-wevasi*
and later 3-stand 3-rest
'And then he (still) is standing (there) and rests.'
36. I: *O ki.*
oh golly
'Oh, golly.'
37. B: *E-lukwe-m makala gala buku-nukwali buka-tupoi*
3-tell-you like not 2.FUT-know 2.FUT-ask
'He (Gunter) told you that if you do not know (what to do) you should ask,
ba-lukwe-m, e besatuta bi-lola bi-suvi va doa
1.FUT-tell-you and now 3.FUT-go 3.FUT-enter DIR door
and I will tell you (what to do); and now he (the toy man) will really go and
he will enter (and pass) through the door.
38. G: *Sena to-kapusi makala Gunter bi-la Tuyabwau.* (laughter)
very CP.male-falling like Gunter 3.FUT-go Tuyabwau
'This man always falls down – like Gunter on his way to the Tuyabwau (well).'¹²
39. B: *Imkubul!*
Imkubul
'Imkubul!'
40. I: *O.*
oh
'Oh!'
41. B: *Bogwa e-suvi e-sunapula i-lola*
already 3-enter 3-exit 3-go
'He entered (and passed through this door) already, he exits (leaves it) and
really walks
u'ula mi-ya-na sena e-meya olakeva.
reason DEM-CP.flexible-DEM very 3-bring up
because this (chain) really brings (him) up.'

¹² This comment refers to an accident I had in 1989, where I severely hurt myself sliding on the slippery reef. The reference provoked much laughter.

42. I: *E ambeya e-lola e-la?*
and where 3-go 3-go
'And where is he really going now?'
43. B: *E-lola e-ma ma-na-kwa daga, e e-toli e-wevasi,*
3-go 3-come DEM-DEM-CP.thing ladder and 3-stand.still 3-rest
'He goes and comes (to) this ladder; and he stops and rests;
ke bogwa e-toli?
well already 3-stand.still
well, has he already stopped?'
44. I: *E.*
yes
'Yes.'
45. B: *E besatuta bi-suvi wi... amakala i-susuvi to-kukupi,*
and now 3.FUT-enter eh how 3-enter CP.male-short
'And now he will enter (and pass through), eh, how, he really enters (and passes through), the little man;
e bogwa e-suvi e-sunapula e-lola.
and already 3-enter 3-exit 3-go
and already he has entered (and passed through), he exits (leaves it) and really walks (on).'
46. I: *E e-lola ambeya bi-mwa?*
yes 3-go where 3.FUT-come
'Yes, he really goes, where will he come to?'
47. B: *E e-lola bi-katukwevivila bi-loki ma-na-kwa kali*
yes 3-go 3.FUT-turn 3.FUT-go.and. arrive DEM-DEM-CP.thing fence
Yes, he really goes, he will turn, he will go and arrive at this fence,
e e-toli bi-wevasi, ke bogwa?
and 3-stand.still 3.FUT-rest well ok
and he stops and rests; well, ok?'
48. I: *E.*
yes
'Yes.'
49. B: *E besatuta bi-lola kali ma-na-kwa vavagi makala daga*
and now 3.FUT-go fence DEM-DEM-CP.thing thing like ladder
'And now he will really go (on the path) between the fence and this thing like a ladder,
e oluvala bi-lola, e e-lola, e-lola-aa e-ma
and in.the.middle 3.FUT-go yes 3-go 3-go-EMPH 3-come
he will really go (there); yes, he really goes; he really keeps on going and he comes
o vokulu va kali e e-toli igau Imkubul?
LOC corner DIR fence and 3-stand.still then Imkubul
to the corner at the fence and he stops then – Imkubul?'

50. I: *E bogwa.*
yes ok
'Yes, ok.'
51. B: *O, e bi-katukwevivila bi-lola bi-la*
oh and 3.FUT-turn 3.FUT-go 3.FUT-go
'Oh, and he will turn and he will really go, he will go
o kwadeva beya misinari la bwala, e i-lola
LOC beach here missionary his house and 3-go
to the beach here at the missionary's house; and he really goes,
e-la kwe-yuvela vokulu e-toli bi-wevasi, bi-wevasi bi-vokwa
3-go CP.thing-again corner 3-stand.still 3.FUT-rest 3.FUT-rest 3.FUT-finish
he goes, the next corner again, he stops, he will rest; he will finish his rest,
oluvi bi-lola bi-la o valu, bogwa Imkubul?
then 3.FUT-go 3.FUT-go LOC place ok Imkubul
then he really will go he will go to his place; – ok, Imkubul?'
52. I: *E bogwa.*
yes ok
'Yes, ok.'
53. B: *E e-lola-aa bogwa e-kanobusi.*
yes 3-go-EMPH already 3-arrive
'Yes, he really kept on going and now he has arrived.'
54. I: *Ka ke bi-lola makala.*
wow well 3.FUT-go like
'Wow, well, he really could go like this.'
55. G: *Bwena.*
good
'Good.'

Appendix 2: Glosses for Figure 5

ela elola

he goes, he really goes

etoli omatala kali

he stands (still) in front of the fence

esuma o kikivama

he comes and passes it (close to me) at the left

bilola bisuva o kikivama

he will go he will go via (this) at the left

ikibwati mapona doa

he is in line with this door

bisuvi

he will enter (and pass through)

esuvi esunapula

he enters (and passes through), he exits (leaves it)

biloki o turaki

he will go and arrive at the truck

emeki turaki daga bisuvi (oluvala)

he comes to the truck and the ladder he enters (and passes through) (in the middle)

ema etoli makena doa

he comes he stands still at this door

bilola bisuvi va doa

he will go he will enter (and pass) through the door

bogwa esuvi esunapula ema manakwa daga bisuvi

already he will enter (and pass through) he exits (leaves it) he comes to this ladder he will enter (and pass through)

esuvi esunapula elola

he enters (and passes through) he exits (leaves) he goes

elola bikatukwevivila

he goes and goes he will turn

kali daga oluvala bilola

the fence the ladder in the middle he will go and go

biloki kali bilola

he will go and arrive at the fence he will go and go

ema o vokulu bikatukwevivila

he comes to the corner he will turn

bilola bila o kwadeva

he will go and go he will go to the beach

ela vokulu

he goes to the corner

bila o valu ela ekanobusi

he will go to his village he goes he arrives

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6 *Roviana clauses*

EVELYN M. TODD

1 Introduction

The Roviana language is spoken in the vicinity of Munda, located on New Georgia Island in the western Solomon Islands.¹ Roviana has been classified as a Western Oceanic language, most closely related to the other Austronesian languages of New Georgia. The number of speakers is about 5,300 (Tryon & Hackman 1983:20), making it one of the more prominent languages of the country. Still there have been few grammatical studies of Roviana, and much is yet to be learned. In 1926 Sidney Ray published a brief 17 page grammar and shortly afterwards J.H.L. Waterhouse (1928, reprinted 1949) produced a dictionary with a grammatical section largely identical to Ray's account. The focus here will be on aspects of the structure of complex predications, excluding details of the argument structure already presented by Corston (1993). Hopefully it will be demonstrated that the impression some have that Oceanic languages are "simple" in syntactic structure is certainly an illusion.

1.1 Basic sentences

Basic sentences in Roviana are based on verbal or non-verbal predicates. Most of the sentences in which English would use the verb 'have' or 'be' are non-verbal structures in Roviana, and they can be found in both principal and subordinate clause roles, although we will not discuss them here in any detail. Verbal predications have VAO/VS word order

¹ The data on which this paper is based was obtained in 1974–77, both in the Solomons and through correspondence with Effie Kari, to whom I extend my gratitude for all her assistance. All features of syntax outlined here will need further study.

respectively in basic transitive/intransitive clauses.² Roviana may be described as a “split-ergative” language.³ The pronouns and some noun phrases have distinctive case features at least in simple sentences, with the agent of transitives receiving ergative case. A list of pronouns and pronominal suffixes is given in the Appendix.

After the verb the intransitive subject and transitive object have absolutive marking in certain cases, commonly indicated by the presence of *si* (ABS(olutive)) before a distinctive pronominal series (the absolutive set). The transitive verb is also indexed for its object (an accusative feature),⁴ while there is a pronominal series (the ergative/neutral set) for the agent/experiencer of transitives.

- (1)
- | | | | |
|----------------------------|------------------|-------------|----------------|
| | V | A | O |
| <i>Ele</i> | <i>dogor-i-a</i> | <i>gamu</i> | <i>si asa.</i> |
| PERF | see-TR-3SGO | we.EXC.ERG | ABS him.ABS |
| ‘We saw him.’ ⁵ | | | |

- (2)
- | | | |
|----------------|----------------|-------------|
| | V | S |
| <i>Korapa</i> | <i>mate si</i> | <i>asa.</i> |
| PROG | die | ABS he.ABS |
| ‘He is dying.’ | | |

Certain other words and phrases may be moved to the left of the verb (or non-verbal predicate), in what may be described as a topic left-dislocation construction in which a particle *si* TOP(ic) precedes the balance of the sentence after the forwarded elements. Noun phrases that are subject to left-movement are usually subjects of the verbs or adjectives they

² The abbreviations used here are:

1,2,3 Person
A(gent) = ergative subject of transitive
ABS(olutive)
ART(icle)
CAUS(ative)
ERG(ative)
EXC(lusive)
FUT(ure)
HAB(itual)
INC(lusive)
IRR(ealis)
LOC(ative)
NEU(tral)
NOM(inative)

O(bject) = direct object of transitive
PASS(ive)
PERF(ect)
PL plural
POSS(essive)
PROG(ressive)
RECIP(ocal)
RED(uplicated)
S(ubject) = subject of intransitive
SG singular
TOP(ic)
TR(ansitiviser)
V(erb)

³ Todd (1978) and Ross (1988) make explicit some aspects of Roviana grammar, but the best account of ergativity and argument structure is Corston’s (1993) *Ergativity in Roviana*.

⁴ Exceptions to this generalisation occur.

(a) Transitive verbs sometimes occur without object-agreement inflection. For example, as Corston (1993) has noted, an indefinite noun phrase object of a transitive verb is backgrounded or in effect ‘incorporated’ into the verb phrase, and then the verb has no object-agreement. Also, verbs that are followed by another verb in a sequence have no object-agreement. Corston (1993) notes that in a relative clause oriented to the object, object-agreement suffixes of the verb are replaced by possessive type suffixes agreeing with the person and number features of the object.

(b) In certain cases a kind of subject-agreement occurs with verbs. For example, the verb *koro* ‘refuse’ has possessive suffixes that agree with its subject; *koro* is apparently an intransitive verb that may take a complement clause. The verbs in complement clauses following verbs of perception also take this kind of subject-marking suffix.

⁵ I use what has become the standard orthography for Roviana. All letters have the expected values except that ‘q’ represents the prenasalised voiced velar stop, ‘g’ represents the voiced velar fricative, and ‘ñ’ represents the velar nasal.

precede. A distinctive series of pronouns (the nominative set⁶) is used when they are advanced in front of the verb complex or non-verbal predicate:

- (3) *Asa si korapa palik-i-a sa nana haha*
 she.NOM TOP PROG carry-TR-3SGO the.SG 3SG.POSS baby
 'She is carrying her baby
pa kauru lima-na.
 LOC under arm-3SG.POSS
 under her arm.'
- (4) *Asa si korapa kabo.*
 he.NOM TOP PROG cry
 'He is crying.'
- (5) *Hie si ginani leana.*
 this TOP food good
 'This is good food.'
- (6) *Asa si ka onomo nana koburu.*
 she.NOM TOP ka⁷ six 3SG.POSS child
 'She has six children.'

As Corston (1993:33-51) has demonstrated, the distinction of ergative vs. absolutive is neutralised in subordinate clauses, and only the ergative/neutral series of pronouns is found there for A, O and S alike. In complement clauses, however, the ergative/absolutive distinction is maintained, although frequently object pronominal arguments may be deleted in surface structure because of the object-marking on the verb.⁸

The balance of this paper will focus on features of complex predicate structure. Details of phrases headed by nouns, adjectives, etc. will not be discussed, but examples will illustrate some of these structures.

1.2 Complex predicates

First we will examine the major constituents of the clause other than arguments – tense/aspect words, modal verbs, directional verbs, and transitivity forms. Then the structure and use of complement clauses will be described, including some details about the use of possessive indexing with verbs. Non-verbal structures with characteristics of verbal clauses will be illustrated occasionally, although a detailed analysis of such structures will not be included.

⁶ Corston (1993) calls these forms the focal set. In my opinion the forwarding of the subject or other elements is not a focus construction, and there is no necessary semantic implication of contrast or new information. There is however, some sense of drawing attention to what the sentence is about, i.e. the topic.

⁷ I am not sure of the proper interpretation for *ka*.

⁸ This is regarded in contemporary Principles and Parameters theory not as deletion, but as the presence of a null pronoun *pro* which accounts for the object-marking agreement on the verb.

2 Predicate structure

Each verbal predicate includes a main verb, and at least one external argument. The main verb may be preceded by one or more tense/aspect words. A modal verb, which has the same understood subject as the main verb, may occur immediately before the main verb, but it cannot occur in transitive form.⁹ After the main verb there may be a directional verb or other serial verb.¹⁰

2.1 Tense/aspect

The main verb in Roviana is preceded by an optional tense/aspect complex:

Table 1: Pre-verbal tense/aspect words

Positions				
-5	-4	-3	-2	-1
<i>gina</i> 'maybe'	<i>lopu</i> 'not'	<i>hite</i> 'a little' <i>tique</i> 'just'	<i>ele</i> 'perfect' <i>kaqu</i> 'irrealis' <i>kote</i> 'future'	<i>hoke</i> 'habitual' <i>korapa</i> 'progressive'

2.1.1 Position -5

The word *gina* 'maybe' occurs before all other pre-verbal forms, and is usually followed by a tense word.

- (7) *Gina korapa hata gutu si asa.*
maybe PROG seek louse ABS he
'Maybe he is looking for lice.'¹¹
- (8) *Gina lopu boka avoso gita sa.*
maybe not can hear us.INC he.ERG
'Maybe he can't hear us.'

Forward movement of *gina* is recorded coincident with forward movement of a noun or pronoun, so that it is in effect clause initial:

- (9) *Gina Maria si lopu kaqu pule mae pa popoa pa holiday.*
maybe Maria TOP not IRR return come LOC home LOC holiday
'Maybe Maria won't come home for the holiday.'

⁹ The modal verbs constitute a small set, and should probably be analysed as taking the following verbs as a complement. In this discussion I am dealing essentially with surface structure. Sometimes a modal verb can occur without any following verbs, and is therefore a main verb in such circumstances – examples will follow in the discussion, but there is often a slight semantic difference between the modal alone, and the modal with following verbs.

¹⁰ Some of the verbs that may occur after the main verb can also occur as main verbs themselves, but usually with a difference in meaning. For example, directional verbs can occur as main verbs of motion. Examples of these alternate usages will be included in the following discussion.

¹¹ The verb-object sequence *hata gutu* 'seek louse' is an example of backgrounding the object and using a verb without transitive suffixing. See above footnote 4(a).

This word is peripheral to the balance of the sentence, and can occur with substantial omission of other words, as in the truncated sentences one finds in conversational discourse.

- (10) *Gina sa Tevai?*
 maybe the.SG Tevai
 'Perhaps [you will travel on] the Tevai?'

2.1.2 Position -4

The negator *lopu* occurs most commonly in position -4, and also in a few phrases that alter the normal order slightly.

- (11) *Gina lopu boka zama si asa sina sigiti sa leo-na.*
 maybe not can talk ABS he because sore the.SG throat-3SG.POSS
 'Maybe he can't talk because his throat is sore.'
- (12) *Asa si lopu kaqu pule mae.*
 he.NOM TOP not IRR return come
 'He will never come back.'

The phrase *lopu sana* 'not long, soon' can occur after a position -2 tense word, although this is not the normal place for a time phrase:

- (13) *Kote lopu sana pule veluvelu mae mo si rau.*
 FUT not long return noon come only ABS I
 'I'll come home early in the afternoon.'

This pre-verbal *lopu* is also the negator used in imperative clauses, as well as in various complement and subordinate clauses.

- (14) *Lopu habotu pa kenu-qu.*
 not sit LOC front-1SG.POSS
 'Don't sit in front of me.'
- (15) *Aria mada ganigani pana lopu tuture mae sa tani.*
 hey let's eat if not hasten come he.NEUT here
 'Let's eat if he doesn't get here soon.'

Similarly it is found in non-verbal sentences as part of the comment.

- (16) *Lopu tasuna si asa koa gami.*
 not hard ABS it.ABS for us.EXC
 'It's not hard for us.'
- (17) *Hie boko si lopu tamu goi.*
 this pig TOP not 2SG.POSS you.NEUT
 'This pig does not belong to you.'

2.1.3 Position -3

The words in position -3 are semantically like degree specifiers, but it is not clear what is the head of the construction if this is their role. Occurring elsewhere as an adjective/adverb/verb, *hite* 'little, a bit, briefly,' in pre-verbal use occurs in position -3, but occasionally follows a position -2 tense word, with no apparent difference in meaning.

- (18) *Lopu hite ele hena hokar-i-a tu sa si keke tona.*
not little PERF eat true-TR-3SGO still he.ERG ABS one thing
'He hasn't eaten anything yet.'
- (19) *Ninoroihe si lopu ele hite dogoro hokar-i-a rau si asa.*
today TOP not PERF little see true-TR-3SGO I.ERG ABS him.ABS
'I haven't seen him yet today.'

The word *tique* 'just, soon, then' indicates a brief span of time in the recent past, where there is no tense indicator.

- (20) *Pita si tique mae kamo pule.*
Peter TOP just come arrive back
'Peter has just come back.'
- (21) *Gami kara si tique vaquru vari-haba.*
we.EXC.NOM two TOP just got RECIP-marry
'We have just been married.'

Most often it occurs in a second clause of a coordinated sequence:

- (22) *Va-ibu hite-a meke tique kote boka napo-a*
CAUS-cool little-3SGO and then FUT can drink-3SGO
goi si asa.
you.ERG ABS it.ABS
'Let it cool a bit and then you can drink it.'

It may also follow the position -3 future word in sequences, perhaps most commonly in the last clause.

- (23) *Kote palek-i rau sari marihi meke*
FUT take-3PLO I.ERG ART.PL yam and
tique kote pudik-i vagi rau sari bini na kavisi
then FUT pick-3PLO get I.ERG ART.PL bean and cabbage
meke kote tique pule la pa popoa.
and FUT then back go LOC home
'I will take the yams, and then I'll pick beans and cabbage, then I'll go back home.'

2.1.4 Position -2

The position -2 pre-verbs express past and future tense. These words are considered to head the construction which they introduce.

Pre-verb *ele* 'perfect' is commonly used whenever it is desirable to make the completion of an act explicit, often implying past tense.

- (24) *Ele garat-i-a keke kukuasa sa ragaraga-qu.*
PERF bite-TR-3SGO one centipede the.SG chest-1SG.POSS
'A centipede bit me on the chest.'
- (25) *Arau si lopu ele hite ta garata.*
INOM TOP not PERF little PASS bite
'I have never been bitten.'

A common expression in discourse is the truncated expression:

- (26) *Lopu ele.*
not PERF
'[I have] not yet [done anything].'

Of the two future pre-verbs, *kote* 'FUT(ure), will' occurs most frequently in the data sample, while *kaqu* 'IRR(ealis), would, should, must' has a more subjunctive meaning, occurring in questions, negatives, and in clauses describing consequences of an action and so forth.

- (27) *Sa tina-na si kote va-susua si asa kamahire.*
the.SG mother-3SG.POSS TOP FUT CAUS-breast.feed ABS him.ABS now
'His mother will breast-feed him now.'
- (28) *Kote kera si rau kote boni.*
FUT sing ABS I FUT night
'I will sing tonight.'
- (29) *Gami si lopu kaqu va-sigiti-go.*
we.EXC.NOM TOP not IRR CAUS-hurt-2SGO
'We won't hurt you.'
- (30) *Be garata pule-au siki si kaqu, va-mate-a rau*
if bite back-1SGO dog TOP IRR CAUS-die-3SGO IERG
si asa.
ABS him.ABS
'If the dog bites me again, I'll kill him.'

These pre-verbs and those that precede them may occur also in non-verbal sentences:

- (31) *Agoi si lopu kaqu hite na tie tolavae-mu.*
you.NOM TOP not IRR little a person beautiful-2SG.POSS
'You will never be a beautiful person.'

2.1.5 Position -1

Aspectual pre-verbs are *hoke* 'HAB(itual)' and *korapa* 'PROG(ressive)'. Temporal expressions that may occur in constructions headed by these words are compatible semantically.¹²

- (32) *Lopu ele hoke kokoha si rau.*
not PERF HAB lie ABS I
'I have never lied.'
- (33) *Arau si hoke puta doduru boni.*
I.NOM TOP HAB sleep every night
'I go to sleep every night.'
- (34) *Asa si korapa ehara.*
he.NOM TOP PROG bleed
'He is bleeding.'

¹² The passive particle *ta* might belong here. The present data are not adequate to make a confident determination.

- (35) *Korapa mae si asa kamahire.*
 PROG come ABS he.ABS now
 'He is coming now.'
- (36) *Asa si ele korapa habotu koa nana mo vasina*
 he.NOM TOP PERF PROG sit stay 3SG.POSS just a.little
doduru munumunuma.
 all morning
 'He has been sitting there all morning.'
- (37) *Korapa habotu pa korapa hore si asa.*
 PROG sit LOC in canoe ABS he.ABS
 'He is sitting in the canoe.'

2.2 Verb sequences

In Roviana it is quite commonplace to have a sequence of verbs, all having the same agent/subject, with no conjunction (or complementiser) expressed between them. From a semantic point of view it is convenient to treat some of these as modal constructions: in these instances the first verb in the sequence typically expresses modality. Other verb sequences have other functions. In some cases the second verb in a sequence expresses directional or resultative meanings. Others have a transitivity function. It is a matter of theoretical interpretation whether such sequences are serial verbs.

Only the last form in any verb sequence is capable of being indexed for an object, that is, the entire verb sequence is transitive or intransitive. Usually the final form is a transitivity verb or a main verb. However, if a directional or other serial verb is final then any transitive object-agreement suffix will be affixed to that verb. In the following discussion a selection of these verbs is presented, in the usual sequence (see Table 2) with no claim to being exhaustive. Discussion of the different types of verbs follows.¹³

Table 2: Verb sequences

Modal	Main	Directional	Transitivity
<i>boka</i> 'can'	(various)	<i>hola</i> 'past'	<i>ni</i> 'with, etc.'
<i>beto</i> 'finish'		<i>gore</i> 'down'	<i>poni</i> 'for'
<i>hiva</i> 'want'		<i>la</i> 'away'	<i>pani</i> 'away, off'
<i>podalae</i> 'begin'		<i>pule</i> 'back'	
<i>kilu</i> 'need'		<i>sage</i> 'up'	
		<i>mae</i> 'hither'	
		<i>vura</i> 'out'	
		<i>palae</i> 'away, off'	
		Resultative	
		<i>beto</i> 'end'	
		<i>va-mate</i> 'kill'	
		<i>va-beto</i> 'finish'	

¹³ I have placed directional and resultative verbs in the same column, because I have no data to indicate that they can occur in the same verb phrase. They therefore appear to contrastive in distribution.

2.2.1 Modal verbs¹⁴

The modal *boka* ‘can, be able, competent, accomplish’ may be used without additional verbs, although it usually occurs in a sequence, and in questions it has a future implication. In sequences the second verb is assumed to have the same subject.

- (38) *Boka dogoro si rau pa kolo bulena.*
 can see ABS I LOC water still
 ‘I can see [myself] in the still water.’
- (39) *Boka paleki-a goi sa pili pa batu-mu.*
 can carry-3SGO you.ERG the.SG basket LOC head-2SG.POSS
 ‘Can you carry the basket on your head?’
- (40) *Arau si lopu boka tunuru.*
 I.NOM TOP not can swim
 ‘I cannot swim.’

By contrast *hiva* ‘like, want’ is recorded only in sequences. As a modal verb it occurs freely with complement main verbs, but as a main verb it occurs with the transitiviser *n-* with nominal objects or clauses with a subject that is different than the subject of the modal (see §3.2 below).

- (41) *Asa si hiva gila-ni-a sa nada zinama.*
 he.NOM TOP want learn-TR-3SGO the.SG 1PL.INC.POSS language
 ‘He wants to learn our language.’
- (42) *Arau si hiva tunuru.*
 I.NOM TOP want swim
 ‘I want to swim.’
- (43) *Nasa si hiva gani-a goi?*
 when TOP want eat-3SGO you.ERG
 ‘When do you want to eat it?’
- (44) *Arau si lopu hiva va-bakoki-a si asa.*
 I.NOM TOP not want CAUS-angry-3SGO ABS him.ABS
 ‘I didn’t mean to make him angry.’

Another verb of this type, not well represented in the data, is *kilu* ‘need’.

- (45) *Lopu kilu toka-ni-gami goi.*
 not need help-TR-1PLEXCL you.ERG
 ‘You don’t need to help us.’

Among the most commonly used modals are *beto* ‘stop, finish, end’ and its antonym *podalae* ‘start, begin’.

- (46) *Ele beto henahena si rau kamahire.*
 PERF finish eat ABS I now
 ‘I am finished eating now.’

¹⁴ It might be more appropriate to consider the modal verbs as main verbs, so that the verbs that follow would be complements or part of complement clauses.

- (47) *Kote lopu sana beto si goi.*
 FUT not long stop ABS you
 'You will finish [doing something] soon.'
- (48) *Arau si kaqu podalae tavetave pa qua tinavete.*
 I.NOM TOP IRR begin work LOC 1SG.POSS job
 'I must get down to work on my job.'

2.2.2 Directional verbs

There appears to be three sets of directional verbs; at least there are examples of sequences with these verbs in the data, although other possibilities may exist. The first set includes *hola* 'pass, very, too, more'. It can occur after another verb, or even more likely after an adjective to indicate comparison.¹⁵

- (49) *Magu hola sa sa lima-na sipu korapa*
 cut very he.ERG the.SG hand-3SG.POSS when PROG
tavetavete sa.
 work he.NEU
 'He cut his hand when he was working.'
- (50) *Arau si korapa gona hola la ni-a si asa.*
 I.NOM TOP PROG throw pass go TR-3SGO ABS it.ABS
 'I threw it on by.'
- (51) *Asa si korapa puta hola.*
 he.NOM TOP PROG sleep past
 'He is sleeping in late.'
- (52) *Mamata hola si asa.*
 heavy pass ABS it.ABS
 'It is very heavy.'

The verb *hola* enters into a number of comparative constructions, the details of which are beyond the scope of this paper. The other verb of the first set is *vura* 'exit, out' which can occur alone as a main verb or in a sequence.

- (53) *Vura sa muzi.*
 exit the.SG pus
 'The pus came out.'
- (54) *Kete rova-na igana hite-hite si honu vura pa kolo.*
 a school-of fish RED-little TOP jump exit LOC water
 'A school of fish is jumping out of the water.'

A second series of directionals indicates the vertical dimension, *gore* 'descend, down', and *sage* 'rise, up', and the idea of returning to the point of origin in *pule* 'return, back'. Instances occur of some of these verbs in the main verb role, as in example (57) and (59).

¹⁵ As the editor has noted, this verb seems to be an intensifier. In my data it seems to suggest going beyond some understood point in space or time.

- (55) *Habotu gore.*
sit down
'Sit down.'
- (56) *Dono gore meke kote dogori-a goi sa kolo*
look down and FUT see-3SGO you.ERG the.SG water
pa hubi-na.
LOC bottom-3SG.POSS
'Look down and you will see water at the bottom [of a well].'
- (57) *Pule la si rau pa popoa.*
return go ABS I LOC home
'I will go back home.'
- (58) *Gona hola pule ni-a telena si asa.*¹⁶
shoot past back TR-3SGO himself ABS him.ABS
'He shot himself by mistake.'
- (59) *Sa vaka-tapuru si sage la pa galegalea rane.*
the.SG boat-fly TOP rise go LOC air sky
'The airplane goes up in the air.'
- (60) *Asa si ovulu sage ni-a sa korea.*
he.NOM TOP lift up TR-3SGO the.SG boy
'He lifted up that boy.'

The third set of directional verbs consists of *la* 'go, to a distance from the speaker', and *mae* 'come toward the speaker.' As main verbs they are simply verbs of motion and direction; as secondary verbs they are mainly directional, rather like adverbs.

- (62) *Lopu la tana.*
not go there
'Don't go there.'
- (63) *Arau si korapa kopu ni-a sa nana haha*
I.NOM TOP PROG care TR-3SGO the.SG 3SG.POSS baby
'I am looking after her baby'
pude asa si boka la pa inuma.
so she.NOM TOP can go LOC garden
'so she can go to the garden.'
- (64) *Kokopo gore la pa pepesa.*
bend down away LOC ground
'Bend down to the ground.'
- (65) *Sa ruku si kote mae.*
the.SG rain TOP FUT come
'The rain is coming.'

¹⁶ The combination *pule-ni* 'return to' is used after active verbs to indicate reflexive, and is commonly found with a reflexive pronoun such as *telena* 'himself' in post-verbal position, while the logical subject is in absolutive case and treated as the object in terms of object-agreement on the verb complex.

- (66) *Paleke mae kaiqa huda.*
 carry come some wood
 'Bring [me] some firewood.'
- (67) *Sarina linetelete si korapa toqolo vura sage mae pa pepeso.*
 ART.PL plant TOP PROG grow exit up come LOC ground
 'The plants are coming up through the ground.'

These two verbs can also occur in advance of the main verb, but in that position they can be considered as coordinating with the following verb sequence. Thus the action described by the directional verbs seems to take place first, followed by the action denoted by the following verb. The word order is thus iconic, representing the actual order of the events denoted.

- (68) *Arau si korapa la geligeli pa korapa hivahivana.*
 INOM TOP PROG go dig LOC in hatchery
 'I'm going [and] digging in the [megapode bird] hatchery.'
- (69) *Pita si tiqe mae kamo pule.*
 Peter TOP just come arrive return
 'Peter has just come [and] arrived back home.'

2.2.3 Resultative verbs

The verb *beto* 'completely, up', which occurs as a modal, also occurs following a main verb indicating completion. This is related in usage to Pidgin English 'pinis'. Also following main verbs are the causatives *va-beto* 'finish, make an end of', and *va-matea* 'kill'.¹⁷

- (70) *Asa si va-hoqa-i sari vovoto meke poraka*
 he.NOM TOP CAUS-fall-3PLO ART.PL egg and break
beto sari doduru.
 finish them.ABS all
 'He dropped the eggs and they all broke.'
- (71) *Pana mate beto sarina natidi, geli sarina marihi.*
 when die up ART.PL plants dig ART.PL yam
 'After these plants die, dig up the yams.'
- (72) *Hiva tiro va-beto-a rau sa buka hie.*
 want read CAUS-finish-3SGO I.ERG the.SG book this
 'I want to finish reading this book.'
- (73) *Kamahire pamu va-mate-i ri sari roqo.*
 now spray CAUS-die-3PLO they.ERG ART.PL mosquito
 'They spray now to kill mosquitoes.'

¹⁷ The causative verb *va-mate* 'kill, make-die' could also be considered purposive as much as resultative. However there is no use of *pude* 'in order to, for' in this sentence, and this is the usual marker of purpose.

2.2.4 Transitivity verbs

The last verbs that can occur in a sequence are what Ray (1926:558) called verbal prepositions, and what others have called prepositional verbs. If any other verb in the verb sequence is one that normally would be transitive it cannot take object-marking agreement suffixes, and these transitivity verbs add an additional argument with object-suffixing on the final verb. Similarly an intransitive verb with a following transitivity verb is in effect syntactically transformed into a transitive phrase.

The verb *ni* (with the allomorph *n-* before vowels) is distinguished by the fact that it occurs only after another verb, and never by itself. Corston (1993:52) explained that it adds valency to another verb. In written Roviana this form is often treated as part of a preceding word, possibly because the association is so strong and frequent that it has in effect become a derivational suffix or enclitic. It does however occur following directional verbs in a larger sequence, and does not seem to do so if the directional verb is a main verb. This suggests a more direct link to the main verb. More research is needed to determine when *ni* is used.

- (74) *Arini si pule mae*
 they.NOM TOP return come
 'They came home'

sipu beto holuholu-n-i ri sari dia luzu pa maketi.
 after finish sell-TR.3PLO they.ERG ART.PL 3PL.POSS potato LOC market
 after they sold all their sweet potatoes at the market.'
- (75) *Asa si boka kopu pule ni-a telena.*
 he.NOM TOP can care return TR-3SGO himself
 'He can look after himself.'
- (76) *Ele paleke mae ni-a sa si keke kata heta*
 PERF carry come TR-3SGO he.ERG ABS one bunch betelnut

taqa rau.
 1SG.POSS me.NEUT
 'He brought a bunch of betel nuts for me.'

Commonly, verbs formed with the causative *va-* are accompanied by *ni*.¹⁸ In (77) the indirect object is realised through the object-agreement on *ni*, while a nominalised clause is a complement of the causative verb compound.

- (77) *Asa si va-dogoro-n-au sa guguna sa tavete hore.*
 he.NOM TOP CAUS-see-TR-1SGO the.SG how.to the.SG make canoe
 'He showed me how to make a dug-out canoe.'

The verb *pani* 'away, off' has the idea of removing something, and occurs in a verb sequence containing a verb of motion.

- (78) *Neri pani-a sa gumi-mu.*
 shave off-3SGO the.SG beard-2SG.POSS
 'Shave off your beard.'

¹⁸ The compounding forms *va-* 'causative' and *vari-* 'reciprocal' are treated as part of lexical compounds, rather than syntactically significant forms. This may require further consideration.

On the other hand the verb *poni* 'feed, give to, for' has a benefactive sense. Unlike the other transitivity markers it can be used as a main verb as well.

- (79) *Pon-i sari boka pude beto sopusopu goi.*
 feed-3PLO ART.PL pig when finish wash you.NEUT
 'Feed the pigs when you have finished washing the clothes.'
- (80) *Boka siovo poni-au kolo goi?*
 can fetch for-1SGO water you.ERG
 'Can you fetch water for me?'

2.3 Time and space expressions

Expressions of location in space and time are the other words and phrases most commonly found at the end of sentences. Temporal words and phrases are frequently subject to left-movement to the beginning of sentences.

- (81) *Agoi si kaqu la pa vetu doduru rane Sade.*
 you.NOM TOP IRR go LOC house every day Sunday
 'You should go to church every Sunday.'
- (82) *Kaiqa totoaso arau si hoke lua pa korapa vaka-tapuru.*
 some time I.NOM TOP HAB vomit LOC in boat-fly
 'Sometimes I get sick in an airplane.'

Occasionally a place phrase may move leftward in front of a post-verbal subject particularly when it is a complement of the verb *koa* 'stay'.¹⁹

- (83) *Boka koa pa qua vasina si goi.*
 can stay LOC 1SG.POSS place ABS you
 'You can stay at my place.'

3 Complement clauses

Certain main verbs or verb sequences select distinctive complement clauses, a few of which will be discussed here. The two sub-classes of verbs to be considered are verbs of perception and manipulative verbs.

3.1 Verbs of perception

In Roviana the verbs of perception which occur in transitive constructions include *avoso* 'hear', *dogoro* 'see', *humana* 'smell' and the complex *kopu ni* 'watch, look after, care for'. Although these verbs may occur with nominal phrase objects (84)a–(84)d, they can be followed instead by a complement clause (85)a–(85)d.

¹⁹ There is also a form of *koa* 'with, for' which shares some of the properties of prepositional verbs, but is inflected differently, and does not necessarily follow other verbs directly. It is usually found following subject and object arguments.

- (84)a. *Dogor-i rau sarini.*
 see-3PLO I.ERG them.ABS
 'I see them.'
- b. *Arau si boka avos-i sarina boko.*
 I.NOM TOP can hear-3PLO thePL pig
 'I can hear the pigs.'
- c. *Human-i rau sarina boko.*
 smell-3PLO I.ERG ART.PL pig
 'I smell the pigs.'
- d. *Arau si korapa kopu ni-a sa nana haha.*
 I.NOM TOP PROG watch TR-3SGO the.SG 3SG.POSS baby
 'I am looking after her baby.'
- (85)a. *Dogor-i rau govete taloa-di.*
 see-3PLO I.ERG flee away-3PL.POSS
 'I saw them run away.'
- b. *Avos-i-a rau kabo-na sa kokorako kokoreo.*
 hear-TR-3SGO I.ERG crow-3SG.POSS the.SG chicken male
 'I heard the rooster crow.'
- c. *Human-i rau kina-di sarina ginani.*
 smell-3PLO I.ERG cook-3PL.POSS ART.PL food
 'I smelled the food cooking.'²⁰
- d. *Arau si hiva kopu ni-a lodu-na sa rimata.*
 I.NOM TOP like watch TR-3SGO set-3SG.POSS the.SG sun
 'I like to watch the sunset.'

The main verb (or verb complex) has object-agreement with the subject of the complement clause in (85)a–(85)d, so this is equivalent to a raising construction found in many other languages, including English.²¹ What is also distinctive however, is that the verb of the complement clause has possessive suffixes agreeing with the subject of that clause. This suggests that the complement clause is perhaps in some sense nominalised.

The use of possessive suffixes and words with the verb in Roviana was described by Ray (1926:555), under the heading "participle". In one case the possessive suffix series *-qu*, *-mu*, *-na*, etc. may be added to a verb, in the other case the independent pronouns *qua*, *mua*, *nana*, etc. occur following the verb. A question to be considered is whether morphological derivation is involved in the possessive suffixing of verbs, or syntactic transformation of a clause into a nominalised form. The use of possessive pronouns in place of the usual pronouns found with verbs is likely to mark a transformation.

Ray states (1926:555), "The simple suffixed pronoun is used to form the verb into an adjective: *tie taloana*, departed man; *dogori putadi si arini*, found them asleep." In his first

²⁰ Food is considered plural in Roviana as it normally consists of several entities.

²¹ In transformational terms, the subject of the complement clause is "raised" to the object position of the matrix clause. In some other languages this would result in the moved nominal receiving accusative case. In Roviana there is no overt movement of the nominal, however. The main verb (complex) object-marking does indicate that the subject of the complement clause is treated "as if" it were the object of the main clause. Other Oceanic languages with object-agreement, e.g. Lengo and Qae of Guadalcanal, also have this type of agreement.

example the verb-suffix form seems to be like an adjective in its position after a noun. Other examples support this analysis, as in sentences where *hola* 'pass, exceed' plus a verb-noun complex follows:

- (86) *Gita sina tie boka-da hola tavete inuma.*
 we.INC.NOM TOP person can-1PL.INC.POSS exceed work garden
 'We are experienced gardeners.'
- (87) *Arini si tie tumae-di hola pa habu igana.*
 they.NOM TOP person know-3PL.POSS exceed LOC catch fish
 'They are expert fishermen.'

In the second example Ray gave of a verb with possessive suffix, we have a sentence in which a verb is followed by series of words that apart from the possessive suffix on the verb (and the sequence of *si arini*, which is pronounced *sarini* nowadays), would be a simple independent clause – **puta si arini*. Compare this to the attested sentence (88).

- (88) *Korapa puta sarini.*
 PROG sleep they.ABS
 'They are sleeping.'

In (85)a the verb plus possessive suffix does not occur following a noun as one would expect of an adjective. Rather, the possessive suffix *-di* agrees with the underlying subject of *taloa*, the final verb in the sequence, while it co-indexes the object of the matrix clause verb *dogori*, itself the form used for a third plural object. There is no noun phrase in the complement clause, and no other pronominal subject. Other examples are found with similar structures. In (89) the complement clause verb sequence begins with a tense word, further suggesting that the suffixed verb is not an adjective, and also there is no subject pronoun in the complement clause, presumably because of the transitive verb in the matrix clause (itself lacking an independent object pronoun).

- (89) *Dogor-i-a rau korapa la sura-na pa vaka.*
 see-TR-3SGO I.ERG PROG go board-3SG.POSS LOC boat
 'I saw him getting into the boat.'

In all attested sentences of this type the clause follows the agent/experiencer of the principal verb in its post-verbal position.

This construction can be contrasted with true derivation of a noun from a verb with the infix/prefix *-in-/in-* which does not carry with it any verb accompaniments:

- (90) *Sa dia kinerakeraso lea.*
 the.SG 3PL.POSS singing good
 'Their singing sounds good.'

Ray (1926:555) also notes, "The verb *followed* by the possessive pronouns of the series *qua, mua, nana, nada, nami, mia, dia* has a participial sense; ...*taloa nana*, he going; *sina matagutu dia*, ...because of their fearing..." (Ray's italics.) This construction is found in the present data in the following:

- (91) *Dogor-i rau sari koburu tutunuru dia pa kolo.*
 found-3PLO I.ERG ART.PL child swim 3PL.POSS LOC water
 'I found the children swimming in the sea.'

This construction differs from the very similar one discussed above, for there is a noun phrase present which acts both as the subject of the complement clause and raised object of the main clause. The post-verbal possessive pronoun agrees with the noun phrase. One example in the data suggests that the noun phrase is separable from the balance of the complement clause, which can be moved leftward to follow the matrix verb:

- (92) *Dono-n-i ovia dia rau sari koreo hiroi.*
 see-TR-3PLO hungry 3PL.POSS I.ERG ART.PL boy those
 'Those boys look hungry to me.'

The use of possessive agreement marking in these constructions requires further study.²²

3.2 Manipulative verbs

Roviana has a group of manipulative verbs that include *hekini* 'forbid', *garunu* 'send', and complex sequences *hiva ni* 'like, want', *tozi ni* 'tell', *ososo ni* 'force' which occur with complement clauses introduced by *pude* 'to'.

- (93) *Hiva ni-go rau pude kaqu va-tatara veko ni-a goi.*
 want TR-2SGO I.ERG to IRR promise put TR-3SGO you.ERG
 'I want you to promise.'
- (94) *Arau si garu-ni-a pude va-vanunu gami pa toto.*
 I.NOM TOP ask-TR-3SGO to CAUS-wake IEXCO LOC time
 'I asked him to wake us in time.'
- (95) *Hekini-go rau pude lopu kaqu taloa si goi.*
 forbid-2SGO I.ERG to not IRR leave ABS you
 'I forbid you to go.'
- (96) *Arau si ele tozi ni-a si asa pude vagi kolo*
 I.NOM TOP PERF tell TR-3SGO ABS him.ABS to get water
taqa rau.
 1SG.POSS I.NEUT
 'I asked him to fetch water for me.'
- (97) *Ososo-n-au sa pude tavetavete poni-a.*
 force-TR-1SGO he.ERG to work for-3SGO
 'He forced me to work for him.'

With the manipulative verbs of force or speech the subject of the complement clause is understood to be the same as the object of the matrix verb, and therefore is not overtly expressed. In the case of *hiva ni* 'want' the verb complex "raises" the subject of the complement clause to be treated as if it is the object of the matrix verb though in (93) such raising must be covert. As a result, the manipulative verb has object-agreement with its object whether it is inherently in place or raised. More data is needed to verify whether or not overt raising can occur.

²² Corston (1993:36-38) discusses the use of possessive suffixes for object-marking of verbs in the case of relative clauses centered on the agent. There are some other instances of possessive suffixing that need further investigation, but it is clearly a device to indicate a difference in syntactic structure.

Appendix: Pronouns and pronominal suffices

Person	Nominative	Ergative	Absolutive
1SG	<i>arau</i>	<i>rau</i>	<i>si rau</i>
2SG	<i>agoi</i>	<i>goi</i>	<i>si goi</i>
3SG	<i>asa</i>	<i>sa</i>	<i>si asa</i>
1EXC	<i>gami</i>	<i>gami</i>	<i>si gami</i>
1INC	<i>gita</i>	<i>gita</i>	<i>si gita</i>
2PL	<i>gamu</i>	<i>gamu</i>	<i>si gamu</i>
3PL	<i>arini</i>	<i>ri</i>	<i>sarini</i>

Person	Object Marking	Possessive Suffix	Possessive
1SG	<i>-au</i>	<i>-qu</i>	<i>qua</i>
2SG	<i>-go</i>	<i>-mu</i>	<i>mua</i>
3SG	<i>-a</i>	<i>-na</i>	<i>nana</i>
1EXC	<i>gami</i>	<i>-mami</i>	<i>mami</i>
1INC	<i>gita</i>	<i>-da</i>	<i>nada</i>
2PL	<i>gamu</i>	<i>-mia/-mi</i>	<i>mia</i>
3PL	<i>-i</i>	<i>-di/-dia</i>	<i>dia</i>

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7 *Linguistic subgrouping in Vanuatu and New Caledonia*

JOHN LYNCH

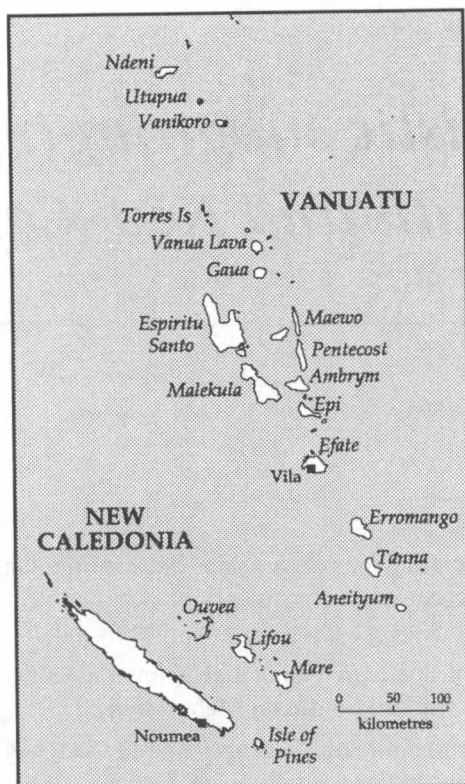
This paper attempts to clarify the relationships between the languages of Vanuatu and New Caledonia.¹ I will present evidence, mainly of a phonological and morphosyntactic nature, to suggest that the following hypotheses are probably valid:

- (a) that the languages of Southern Vanuatu and New Caledonia form a single subgroup of Oceanic, which I will call **Southern Melanesian**;
- (b) that these Southern Melanesian languages and the languages of north and central Vanuatu form a higher-level subgroup of Oceanic, which I will call **Southern Oceanic**; and
- (c) that within Southern Oceanic the Southern Melanesian languages are most closely related to the languages of Central Vanuatu, as members of a **Nuclear Southern Oceanic** grouping and, specifically, that their closest relative is the South Efate language.

1 Previous subgrouping hypotheses

Speakers of the languages with which I am concerned here occupy the Vanuatu archipelago, the Loyalty Islands, and the mainland of New Caledonia (see Map below). In this section, I will discuss the most recent subgrouping hypotheses relating to these languages.

¹ I am grateful to Ross Clark, Terry Crowley, Paul Geraghty, Françoise Ozanne-Rivierre, Bill Palmer, Andrew Pawley, Malcolm Ross and Darrell Tryon for helpful comments on various earlier versions of this paper.



Map: Vanuatu and New Caledonia

1.1 The North-Central Vanuatu (NCV) family

Building on earlier work, especially that of Pawley (1972) and Tryon (1976), Clark (1985b) sets out a number of morphosyntactic innovations shared by the ninety or so members of this family:²

- (1) a. POc **-mu* 2SG possessive suffix was replaced by PNCV **-mwa*.
- b. POc **koe* 2SG independent pronoun was replaced by PNCV **ni(kg)o*.
- c. POc **(kg)u* 1SG subject pronoun was replaced by PNCV **na*.
- d. POc **i* locative preposition replaced by PNCV **a*.
- e. POc **lalo* 'inside' became PNCV **lolo*.
- f. POc **i lalo* > PNCV **(a)lo* locative preposition (via **a lolo* – cf. (1)d and (1)e above).
- g. Development of a biposed negative, preverbal **(st)a(vb)V* plus postverbal **tea*.

There appear to be no phonological innovations uniquely shared by the NCV family, though there are a number of apparent lexical innovations (Clark 1985b:209-210, n.d.).

² POc orthography follows Ross (1988), and Clark's PNCV orthography has been changed to conform with this: e.g., his **q* is written here as **g*, his **g* as **ŋ*, his **ʔ* as **q*, etc. Data on NCV languages have been drawn from a variety of sources, including particularly Clark (1985a, 1985b); Crowley (1985, 1992); Early (1994); Tryon (1976).

North-Central Vanuatu, according to Clark, has two first-order subgroups:

- (a) a Northern Vanuatu (NV) subgroup, comprising the languages of the Banks and Torres Is., Santo, Ambae, Maewo and the Raga language of north Pentecost; and
- (b) a Central Vanuatu (CV) subgroup, comprising the remaining languages of Pentecost along with the languages of Malakula, Ambrym, Paama, Epi, the Shepherd Islands and Efate.

The NV languages are quite conservative, and “much of their similarity appears to be due to common retention rather than innovation” (Clark 1985b:211). Nevertheless, Clark notes the following morphosyntactic innovations:

- (2)a. Development of a possessive marker **bula-* marking animal or household property.
- b. Apparently unique development of **tamwa* ‘how?’ and **tari* ‘many, large number’.

There are also a small number of lexical innovations.

The Central Vanuatu subgroup appears to be defined by the following innovations:

- (3)a. Verb-initial consonant mutation, with nasal grade correlating roughly with “realis” and oral grade with “irrealis” (though see Crowley 1991 for further discussion on this).
- b. POC **inau* 1SG independent pronoun became PCV **(kg)inau*.
- c. PNCV **ni(kg)o* 2SG independent pronoun (see (1)b above) was replaced by PCV **(kg)aigo*.³
- d. Development of a copula verb PCV **vei*.
- e. Marking of plural nouns by postposing the 3PL independent pronoun.

There is also a number of lexical innovations.

There have been suggestions that the NCV languages are most closely related to the Central Pacific (CP) family (Fijian, Rotuman and Polynesian) as part or all of an Eastern Oceanic (EO) subgroup of Oceanic (e.g. Pawley 1972; Geraghty 1990). The issue has been clouded by debates on the relationship between these languages and those of (a) the South-East Solomons and (b) Micronesia. These issues need not concern us for the moment.

1.2 The Southern Vanuatu (SV) family

The Southern Vanuatu family,⁴ while informally recognised for some time, was formally established by Lynch (1978b), on the basis of a number of shared phonological and morphological innovations, including:

³ Proto NCV **ni(kg)o* was reconstructed on the basis of reflexes in both NV languages and some CV languages (Nakanamanga, for example). The form **(kg)aigo*, however, is reflected only in CV languages, suggesting that the two may have been competing forms in Proto CV.

⁴ Data on Southern Vanuatu languages are drawn mainly from Crowley (1998); Lindstrom (1986); Lindstrom and Lynch (1994); Lynch (1978a, 1978b, 1982a, 1982b), and Lynch and Capell (1983).

- (4)a. Loss of pretonic POc vowels, followed by loss of word-final single vowels.
- b. POc **o* is reflected as a non-back, non-round vowel (usually *e* or *ə*).
- c. The POc conjunction **ma* 'and' became a verbal prefix in an echo-subject construction.
- d. Accretion of an initial vowel onto most verbs.

Lynch (1978b) also outlined a number of lexical innovations.

The SV family as established in Lynch (1978b) has three branches: the languages of Erromango, those of Tanna, and the language of Aneityum. The details of this need not concern us here.

1.3 The New Caledonian (NC) family

The languages of New Caledonia and the Loyalty Islands form a single group within Oceanic. I follow Ozanne-Rivierre (1992) in using the term New Caledonian to refer to this family.⁵ Geraghty (1989a) presents a number of innovations, all phonological or lexical, apparently shared by all NC languages. Of particular interest are the following phonological developments:

- (5)a. Loss of **R*.
- b. Merger of **l* and **n*.
- c. Merger of intervocalic **k* and **q*.
- d. Deletion of final vowels.

Within the NC family, there appears to be general agreement that the Loyalty Islands languages form one subgroup, while two other subgroups – Northern and Southern – are found on the New Caledonian mainland. Geraghty (1989a:144) says that subgrouping theories relating to these languages

have been remarkable for the complete lack of any kind of supporting evidence, and for the uniformity with respect to subgroup boundaries. The only disagreement has been as to relationship among the subgroups.

1.4 Interrelationships

The SV languages lie geographically between the NCV and the NC subgroups of Oceanic, and it would be logical to look for connections in either direction.

Grace's (1955) preliminary classification of Oceanic included the NCV and SV languages in a single grouping of Oceanic (along with Central Pacific and Nuclear Micronesian); New Caledonian mainland languages were assigned to another group, and Loyalty Islands languages to a third.

In looking at the external relationships of NCV languages, Clark (1985b:221) says that:

⁵ This is preferable to the more accurate, but also more cumbersome, term *New Caledonia-Loyalty Islands*. Geraghty (1989a) calls this family *Southern Oceanic*, but I feel that this term is better used to refer to a wider grouping – and specifically to the grouping of Vanuatu and New Caledonian languages which I propose below.

Data sources on New Caledonian languages include Grace (1975); Haudricourt (1963); Haudricourt and Ozanne-Rivierre (1982); Lichtenberk (1978); Moyses-Faurie (1983); Ozanne-Rivierre (1976, 1984, 1992, 1995), and Rivierre (1980, 1991).

there are significant shared lexical innovations between NCV and South Vanuatu. In fact, it is hard to find a clear instance of SV preserving an original feature lost by NCV. We must seriously consider the possibility of a larger Vanuatu subgroup, which splits into NCV and SV; or perhaps even a more intimate relation, considering that SV seems to uniquely share a few innovations with sub-sets of NCV languages.

Geraghty (1989a:147), in examining the innovations of the New Caledonian family, comments that this family

is more closely related to Vanuatu, and especially Southern Vanuatu, than to any other language family.

This paper will be concerned with these wider links.

2 The Southern Melanesian hypothesis

The Southern Melanesian hypothesis states that the Southern Vanuatu and New Caledonian families have a single and unique common ancestor, Proto Southern Melanesian (PSM). In this section, I will adduce morphosyntactic and phonological evidence which tends to support this hypothesis.

The phonological histories of these languages are quite complex, and are still not well understood. However, a great deal of work has recently been done on the phonological history of the NC languages (see, *inter alia*, Ozanne-Rivierre 1992, 1995; Ozanne-Rivierre & Rivierre 1989; Rivierre 1991, 1993, 1994b). This work now needs to be coordinated with lexical reconstruction and, at the same time, we need to have a far better understanding of the phonological history of the SV languages than that outlined in Lynch (1978b). This work is in progress, and will hopefully lead to a better understanding of the phonological history of putative Proto Southern Melanesian. For the moment, however, statements of phonological innovations must be somewhat tentative.

2.1 PSM **ma* 'same-subject marker'

The Proto Oceanic coordinating conjunction **ma* 'and' was apparently reinterpreted in putative PSM as a preverbal marker indicating that the subject of the clause it occurs in is the same as the subject of the preceding clause.

Southern Vanuatu

One of the morphosyntactic innovations on which the Southern Vanuatu subgroup was originally based – (4)c above – was the development of the Proto Oceanic coordinating conjunction **ma* 'and' as a same-subject prefix *m-*. This marks a clause as having the same subject as that of a previous clause, and occurs in the same rank as the other subject-indexing prefixes in those languages which have such prefixes (i.e. those of Erromango and Tanna). In the examples in (6), the subjects of the conjoined clauses are different, and each is indexed with the appropriate person-number preverbal marker:⁶

⁶ In the Southern Vanuatu languages, orthographic *g* represents /ŋ/ and *c* represents /ɣ/. Anejoŋ *p̄* and *m̄* represent /pʷ/ and /mʷ/. Abbreviations in examples which may require some explanation include:

AOR	aorist	S	subject
DETR	detransitiviser	SG	singular
EXC	exclusive	SS	same-subject
INC	inclusive	TR	transitive

(6) **Sye**

Tion yi-tai Pil im y-alou
 John 3SG.PAST-hit Bill and 3SG.PAST-run.away

Lenakel

Tion r-əm-ho Pil (kani) r-əm-akəmw.
 John 3SG-PAST-hit Bill (and) 3SG-PAST-run.away

Anejoĩm

Et awod Pil a Jon aĩm lep et aha aen.
 3SG.AOR hit Bill S John and then 3SG.AOR run.away he
 'John hit Bill and he (Bill) ran away.'

In (7), however, the subjects of the conjoined clauses are the same, and the same-subject prefix is used instead:

(7) **Sye**

Tion yi-tai Pil m-alou
 John 3SG.PAST-hit Bill SS-run:away

Lenakel

Tion r-əm-ho Pil (kani) m-əm-akəmw.
 John 3SG-PAST-hit Bill (and) SS-PAST-run.away

Anejoĩm

Et awod Pil a Jon lep m-aha aen.
 3SG.AOR hit Bill S John then SS-run:away he
 'John hit Bill and he (John) ran away.'

New Caledonian

The same development appears to have taken place in at least some New Caledonian languages. Drehu, a member of the Loyalty Islands subgroup, has two coordinating conjunctions roughly translated as 'and'. One is *nge*, which seems to have the most general use:

(8) **Drehu**

Angaatr palahi a hnyima nge angeic la a treij.
 they always PRES laugh and he this PRES cry
 'They are still laughing and he is crying.'

The other conjunction is *me*, which

coordonne en général des lexèmes ou des syntagmes nominaux. Il peut aussi coordonner des prédicats, à condition que le sujet ou l'agent soit le même pour les deux prédicats. (Moyse-Faurie 1983:184; my emphasis)

For example:

(9) **Drehu**

Angaatr a i-aba me i-hnyima.
 they PRES DETR-embrace and.SS DETR-laugh
 'They embraced each other and laughed together.'

Hnei angeic hna oleen me kapa la itre atr.
 AG he PAST thank.TR and.SS receive.TR ART PL man
 'He thanked and received the men.'

Ajië, which belongs to the North New Caledonian subgroup, has a coordinating conjunction *ma* 'and' which

is used both in clausal and NP coordination as well as in other types (e.g. directionals). It does not seem to be omissible in a string of conjoined elements. **Note that *ma* can conjoin clauses with coreferential subjects only and that clauses introduced by *ma* typically have no subjective pronouns.** (Lichtenberk 1978:113; my emphasis).

For example:

- (10) **Ajië**
Na pwa' ma kuru rrö-a.
 3SG arrive and.SS sleep in-there
 'He arrived and slept there.'

Summary

This development of POC **ma* as a verbal prefix or preverbal particle marking same-subject conjunction (with deletion of the subject-referencing marker) is, as far as I know, found nowhere else within Oceanic. It suggests that the Southern Vanuatu and New Caledonian languages may form a single subgroup of Oceanic, and that this innovation occurred in Proto Southern Melanesian. Some New Caledonian languages do not reflect **ma* with this function; the assumption here is that they have made subsequent morphosyntactic changes.

2.2 Development of the plural pronouns

The Proto Oceanic independent or disjunctive first and second person plural pronouns seem to have been as follows (Ross 1988 *inter alia*):

- (11) **POc**
**kita* 1INC.PL
**ka[ma]mi* 1EXC.PL
**kam(i)u* 2PL

Southern Vanuatu

Proto Southern Vanuatu (PSV) made one innovation in this pronoun system, and two others were working their way through the system when PSV began to break up. The innovation shared by all SV languages is a change from **t* to **d* and metathesis of the vowels of the first inclusive form, POC **kita* becoming something like **kadi*.⁷

⁷ Tanna *t* and Anejoñ *j* are the regular reflexes of POC **d* (the regular reflex of non-initial **t* being, e.g., Lenakel *r*, Anejoñ *t*). **d* undergoes palatalisation before **i* in the languages of Erromango (Sye *h* deriving from an earlier *s*).

- (12) **Sye** *koh*, **Ura** *qis*
North Tanna, **Whitesands** *kit-*, **Lenakel** *kat-*, **S.W. Tanna** *kat-*,
Kwamera *kət-*
Anejoñ *a/kaj-*.

The forms **kami* 1EXC.PL and **kamiu* 2PL are retained in Erromango and in western and southern Tanna; for example:

- | | | | | |
|------|-------------|----------------|----------------|---------|
| (13) | Sye | Lenakel | Kwamera | |
| | <i>kam</i> | <i>kam-</i> | <i>kəm-</i> | 1EXC.PL |
| | <i>kimi</i> | <i>kami-</i> | <i>kəmi-</i> | 2PL |

However, in north-eastern Tanna (North Tanna and Whitesands) and in Anejoñ, the **k* in these forms was replaced by the reflex of **d* (with the two Tanna languages accreting initial *i*, also found in singular pronouns, and with Anejoñ subsequently losing the **m* in the second person form):

- | | | | | |
|------|--------------------|-------------------|---------------|---------|
| (14) | North Tanna | Whitesands | Anejoñ | |
| | <i>i/tm-</i> | <i>i/təm-</i> | <i>a/jam-</i> | 1EXC.PL |
| | <i>i/təm-</i> | <i>i/təmw-</i> | <i>a/jou-</i> | 2PL |

It is instructive here to compare the Anejoñ object and independent pronouns (orthographic *c* = /ɣ/):

- | | | | |
|------|---------------|--------------------|---------------|
| (15) | Anejoñ | Independent | Object |
| | 1INC.PL | <i>a/kaj-</i> | <i>caj-</i> |
| | 1EXC.PL | <i>a/jam-</i> | <i>cam-</i> |
| | 2PL | <i>a/jou-</i> | <i>cou-</i> |

The object pronouns show lenition of /k/ to /ɣ/. This occurs in all persons, indicating direct inheritance from the POC **k*-initial forms. The independent pronouns, however, have undergone the innovation.

Thus the Proto Southern Vanuatu first and second person non-singular independent pronouns were probably as follows (with the arrow meaning 'in the process of changing to'):

- | | | | | |
|------|-------------------------------|---|--------------|---------|
| (16) | Proto Southern Vanuatu | | | |
| | <i>*kadi</i> | | | 1INC.PL |
| | <i>*kami</i> | > | <i>*dami</i> | 1EXC.PL |
| | <i>*kamiu</i> | > | <i>*damu</i> | 2PL |

New Caledonia

There is evidence that the same development took place in at least some New Caledonian languages. In the languages of the Hienghène area (Haudricourt & Ozanne-Rivierre 1982:246), for example, the pronouns corresponding to those discussed above are:

- | | | | | | |
|------|-------------|-------------|-------------|-------------|---------|
| (17) | Pije | Fwâi | Nemi | Jawe | |
| | <i>nai</i> | <i>nei</i> | <i>nei</i> | <i>deye</i> | 1INC.PL |
| | <i>nabe</i> | <i>nemi</i> | <i>nemi</i> | <i>deve</i> | 1EXC.PL |
| | <i>dawe</i> | <i>dawe</i> | <i>daa</i> | <i>jaa</i> | 2PL |

Thus the original forms might have been something like:

(18)	Pre-Pije-Fwâi-Nemi	Pre-Jawe	
	* <i>(ln)ai</i>	* <i>(dr,c)atV</i>	1INC.PL
	* <i>(ln)a(bm)V</i>	* <i>(dr,c)apV</i>	1EXC.PL
	* <i>dawV</i>	* <i>daa</i>	2PL

Notable in this set of data are the following facts:

- (i) the first vowel in the inclusive form is *a*, not *i*, suggesting the same metathesis as in PSV; and
- (ii) the second person form has a reflex of **d* in initial position.

This suggests that the metathesis in the inclusive form and the replacement of **k* by **d* in at least one of the other two forms was probably also occurring in a language ancestral to those of the Hienghène area. (The change from initial **k* to **n* or **l* in Pije, Fwâi and Nemi, however, does not bear any resemblance to SV forms.)

I have attempted, without much success, to examine whether the pronouns in Kumak, Ajië, Xârâcùù, Cèmuhî, Iaaï and Drehu either participate in this innovation or continue the Proto Oceanic **k*-initial forms. It looks as if Cèmuhî *wö/game* 1EXC.PL and *wö/gawé* 2PL do continue the original POC pronouns, though *wö/ganye* 1INC.PL seems more problematical. However, in none of the other languages I have looked at does there appear (to me, at least) to be evidence for either retention of initial **k* or replacement of **k* with **d*. The only suggestive set of data is the different initial consonant in Kumak *hââk* 1INC.PL as opposed to *yavaak* 1EXC.PL and *yawaak* 2PL.

The development of the pronouns in the NC languages must await further investigation. However, the evidence I presented earlier in this section is suggestive of a possible shared innovation which was working its way through the putative Southern Melanesian subgroup at the time it began to diversify.

Discussion

Walsh (1982) has pointed out that an apparently similar development has occurred in some NCV languages. While **k* is retained in the first inclusive form, the following innovations have taken place in the first exclusive and second person forms:

- (i) In the Torres, Banks, Maewo, Pentecost, parts of Ambrym and Paama, **k* has been replaced by **g*.⁸
- (ii) In West Santo, **k* has been either lost or replaced by a nasal (usually *n*).

Neither of these directly parallels the **k* > **d* shift in some SV and NC languages. However, in all three cases, there is a shift from an oral phoneme to a nasal or nasalised one. Clark (1985b:219) feels that this phenomenon "could as well be a retention from PNCV". If this is so, then it is a weak argument against the Southern Melanesian hypothesis (but also a weak argument supporting the Southern Oceanic hypothesis, to be discussed in §4 below).

⁸ Malcolm Ross informs me (pers. comm.) that some languages in Papua New Guinea reflect **g* rather than **k* in these forms, suggesting that the innovation may go back to a much earlier stage of Oceanic.

2.3 Irregular phonological developments

Languages of the putative Southern Melanesian subgroup apparently share the following irregular phonological developments exclusive of any other Oceanic languages (cf. Geraghty 1989a):

- (19)a. POc **pisiko* 'flesh' changes irregularly to **pisako* in both SV and NC languages (e.g. Lenakel *nu/vhak-*, Kumak *perak*).⁹
- b. POc **paRaRa* 'handle' is replaced by **umwa* (e.g. Lenakel *n/imwa-*, Kumak *mwa/t*) (Geraghty 1989a:150).
- c. Geraghty (1989a:153) suggests that the metathesis of POc **puŋa-* 'flower' > **paŋu-* is an innovation of Proto New Caledonian. However, this innovation also occurs in Southern Vanuatu: Sye *no/vgu/n* 'fruit', Ura *ne/vgu/n*, North Tanna *n/agu-* show this clearly, while Whitesands and Lenakel *no/ug-* are ambiguous (since *u* derives both from **u* and, in some environments, from **p*).

2.4 Summary

The evidence supporting the existence of a Southern Melanesian subgroup is at present not large in terms of quantity. However, the development of **ma* as a same-subject marker, and the irregular developments in the non-singular pronouns, are qualitatively fairly strong pieces of evidence, and suggest that the Southern Melanesian hypothesis is worthy of closer and more detailed investigation.

3 The link with South Efate

Efate presents a quite complex dialect situation (Clark 1985a). The language I refer to here as South Efate includes the Pango-Erakor-Eratap dialect-complex (Clark's "South Efate") as well as the dialects of Epau and Eton. The other Efate language is Nakanamanga, sometimes known as "North Efate", which includes all other Efate dialects (apart possibly from the Lelepa dialect which appears to be transitional between South Efate and Nakanamanga), as well as dialects spoken on (parts of) various islands immediately to the north (Tongoa, Emae, Nguna, Moso, Ñele and Emau).

There are two compelling pieces of phonological evidence which link part or all of the Southern Melanesian family specifically to the South Efate language, its geographically closest neighbour to the north. These apparent innovations are **not** found in Nakanamanga, South Efate's closest relative within the Central Vanuatu subgroup.¹⁰

3.1 Dissimilation of **a*

The first piece of phonological evidence I will look at concerns the dissimilation of **a* in **aCa* sequences.

⁹ However, Françoise Ozanne-Rivierre informs me that Iaai *vii-* "flesh" derives regularly from **pisiko*.

¹⁰ I am indebted to Ross Clark for steering me away from certain invalid over-generalisations concerning the links between the SM and CV languages.

South Efate

Clark (1985a:19) describes a process of vowel dissimilation in South Efate whereby original **aCa* sequences dissimilated to *eCa*. The following data illustrate this:

(20)	Proto Efate	Nakanamanga	South Efate
	<i>*miala</i> 'red'	<i>miala</i>	<i>miel</i>
	<i>*tavakau</i> 'rough mat'	<i>tokovau</i>	<i>tefkou</i>
	<i>*na-sama</i> 'outrigger'	<i>na-sama</i>	<i>n-sem</i>
	<i>*sara</i> 'flow'	<i>sara</i>	<i>ser</i>

Southern Vanuatu

A very similar development has taken place in Southern Melanesian languages, though perhaps not quite as comprehensively as in South Efate. The exact details of the nature of this rule, and its relationship to other rules discussed below, still need to be worked out. The situation is complicated somewhat by the development of a sixth vowel /ə/ in the Tanna languages, and by various assimilatory rules (e.g. **aCi* > *eCi*, **aCu* > *oCu*). However, the following Kwamera examples are illustrative of this process:

(21)	Proto Oceanic	Kwamera
	<i>*marama</i> '(moon) shine'	<i>mer</i>
	<i>*mataq</i> 'raw'	<i>a/mera</i>
	<i>*tama</i> 'father'	<i>remu-</i>
	<i>*baga</i> 'banyan'	<i>nə/pek</i>
	<i>*draRaq</i> 'blood'	<i>nə/te-</i>
	<i>*mata</i> 'eye'	<i>neni/me-</i>
	<i>*paRaq</i> 'sprouting coconut'	<i>nu/vera</i>
	<i>*paŋan</i> 'eat (intr.)'	<i>a/vegən</i>

There are, however, cases where the dissimilation has not occurred:

(22)	Proto Oceanic	Kwamera
	<i>*taRaq</i> 'cut'	<i>ara-i</i>
	<i>*[ka]ŋaRi</i> 'almond'	<i>n/age</i>
	<i>*masawa</i> 'open space'	<i>kwa-n/mahan</i>

I am unable to explain at this stage why dissimilation occurred in some cases in Kwamera, like (21), but not in others, like (22). It may have something to do with neighbouring consonants, or there may be some other factor involved. (I am also not clear whether or not the dissimilation rule applies without exception in South Efate: this will require further investigation.)

New Caledonia

The situation in New Caledonian languages is less clear: I have been unable to locate any detailed treatment of POc vowels in NC languages as a whole, and have had to rely on superficial observation. That observation presents a confusing picture. Consider the following:

(23) **Proto Oceanic**

<i>*jalan</i>	'road'	Drehu ðɛ-, <i>go/ðeñ</i> ; Nengone <i>len</i> but Kumak <i>ndaan</i> , Pwapwâ <i>ndan</i>
<i>*rani</i>	'daytime'	Yuanga <i>teen</i> but Kumak <i>taan</i>
<i>*mata</i>	'eye'	Ajië -mɛ-, Iaai -mɛka but Nemi <i>maa-</i>
<i>*papa</i>	'carry'	Kumak <i>phe</i> , Nemi <i>fe</i> , Cèmuhî <i>pé</i> but Nyelâyû <i>pha</i> , Paicî <i>pá</i>

We cannot discount the hypothesis that dissimilation of **a* also took place in Proto NC. However, further investigation is needed to establish the development of **aCa* sequences in PNC.

Discussion

Terry Crowley (pers. comm.) reminds me that the same kind of dissimilation occurs in the southern dialect of Paamese, though not the northern dialect; and of course similar statements can be made about other Oceanic languages – for example, some of the Micronesian languages. However, the fact that this dissimilation pattern occurs in these geographically contiguous languages, **and** that it ties in very closely with the vowel loss rules to be discussed below, suggests that it may be a significant shared development; on the other hand, it may be an areal phenomenon.

3.2 Vowel loss

South Efate and the Southern Melanesian languages lose vowels in various word-final and word-medial environments. I discuss word-final vowel loss first, since it is a more obvious process. In §3.2.2 I will describe the theories that have been put forward to explain word-medial vowel loss in the various languages under discussion, but will offer a reinterpretation in §3.2.3 which shows very clear links between these processes.

3.2.1 Word-final vowel loss

Both South Efate and Southern Vanuatu languages lose a word-final vowel in absolute final position in certain contexts.

South Efate

In South Efate, “final short vowels are lost unless immediately preceded by a lower vowel (i.e. part of a rising diphthong)” (Clark 1985a:19). Thus word-final vowels are lost in the forms in (24)a below, but not those in (24)b. This vowel loss does not take place, however, in Nakanamanga, as the data in (24) show.

(24)	Proto Efate		South Efate	Nakanamanga
a.	<i>*nayaru</i>	'casuarina'	<i>naar</i>	<i>nearu</i>
	<i>*mauri</i>	'live'	<i>mour</i>	<i>mauri</i>
	<i>*na-ika</i>	'fish'	<i>ne-ik</i>	<i>na-ika</i>
	<i>*nrua</i>	'two'	<i>nru</i>	<i>duua</i>
b.	<i>*natae</i>	'excrement'	<i>ntae</i>	<i>natae</i>
	<i>*na-tau</i>	'year'	<i>n-tou</i>	<i>na-tau</i>
	<i>*(u)mai</i>	'come'	<i>mei</i>	<i>umai</i>

Southern Vanuatu

A basically identical statement can be made for Southern Vanuatu languages (once again represented here by Kwamera). Single short vowels are lost, as are vowels in falling diphthongs, as in (25).

(25)	Proto Oceanic	Kwamera
	<i>*rani</i>	'(be) day' <i>ran</i>
	<i>*kabu</i>	'fire' <i>n/apw</i>
	<i>*kutu</i>	'louse' <i>ur</i>
	<i>*qupi</i>	'yam' <i>n/uk</i>
	<i>*panua</i>	'village' <i>ru/kwanu</i>
	<i>*rua</i>	'two' <i>kə/ru</i>

There are almost no examples of word-final rising diphthongs in my data, since protoforms ending in such diphthongs either take a transitive or possessive suffix or have accreted some other material to make these diphthongs non-final. Note, however, Kwamera *nai* 'tree, wood', ultimately from POc **na-kayu* but probably more immediately from a PSV form **n-ɣai*; and *nui* 'water' from PSV **n-wai* (though ultimately from POc **waiR*). These forms show retention of the final vowel in a rising diphthong.

It should be noted parenthetically here that, although POc **q* is lost in SV languages, and **R* is lost word-finally, these losses occurred **after** the word-final vowel loss rule. Thus the vowel in a final **Vq* or **VR* sequence is protected from this rule:

(26)	Proto Oceanic	Kwamera
	<i>*tubuq</i>	'swell up' <i>rupu</i>
	<i>*piRaq</i>	'k.o. taro' <i>nu/via</i>
	<i>*tanoq</i>	'earth' <i>təna</i>
	<i>*qauR</i>	'bamboo' <i>n/au</i>

New Caledonia

Geraghty (1989a:148) noted a contrast between the languages of Southern Vanuatu and New Caledonia: he says that in SV "many final vowels are lost", whereas in NC "most final vowels are retained, except that *a* is lost in some forms". However, an examination of the data suggests that this is inaccurate, and that there is quite a deal of final vowel loss in the NC languages. For example:

Les voyelles finales POC disparaissent quand le réflexe en Hienghène est un nom indépendant (sans suffixe), un verbe intransitif ou un terme grammatical. ...Les voyelles finales POC se maintiennent quand le réflexe en Hienghène est un verbe transitif ou un nom comportant un suffixe possessif ou une consonne finale épenthétique.

(Haudricourt & Ozanne-Rivierre 1982:55)

That is, in the Hienghène languages, a transitive or possessive suffix or some other excrescent consonant protects final vowels from deletion, as in:

(27)	Proto Oceanic	Pije
	<i>*kani</i> 'eat'	<i>cani</i>
	<i>*taci</i> 'younger sibling'	<i>tali-</i>
	<i>*kutu</i> 'louse'	<i>cii/k</i>

However, in other environments, final vowels are deleted:

(28)	Proto Oceanic	Pije
	<i>*-gu</i> 'my'	<i>-ŋ</i>
	<i>*mate</i> 'die, dead'	<i>mac</i>
	<i>*qate</i> 'liver'	<i>kec</i>
	<i>*qone</i> 'sand'	<i>kon</i>
	<i>*maqati</i> 'reef'	<i>maac</i>

Something similar could be said about Kumak (Grace 1972) and other languages of the Northern subgroup at least (Rivierre 1991). There thus appears to be a similar process at work here as there is in South Efate and the Southern Vanuatu languages, though this needs further checking.

Discussion

Obviously, final vowel loss is not a strikingly unusual innovation. It occurs, for example, in many of South Efate's northern relatives, in both the CV and NV subgroups. The important point here, however, is that the rule which applied in South Efate did not apply in South Efate's **immediate** relatives in the Central Vanuatu subgroup – Nakanamanga, Namakira, and the languages of Epi.¹¹ That is, in the language immediately ancestral to South Efate, final vowels were still present. These have been subsequently lost – in South Efate, in Southern Vanuatu, and in New Caledonian. This suggests, therefore, a close link between the South Efate and SM languages, the exact nature of which I will leave until §5 below.

3.2.2 Word-medial vowel loss: earlier interpretations

I mentioned earlier that Geraghty (1989a) proposed that a rule of pretonic vowel loss may be a shared innovation between SV and NC languages, and Clark (1985a) has discussed a quite different rule of medial vowel loss in South Efate. I will look at published treatments of these processes in this section, and will offer a reanalysis in the next.

¹¹ There is some evidence of incipient word-final vowel loss in some of those languages, but this is probably a much more recent, and independent, process, and may be part of a wider areal phenomenon.

Southern Vanuatu

I have described a rule in Proto Southern Vanuatu which deleted the vowel of the antepenultimate syllable of words of four or more syllables under certain conditions (Lynch 1978b:739). I assume that penultimate stress was the norm in PSV, that final long or geminate vowels counted as two syllables for purposes of assigning stress, and that the word-final short vowel deletion rule described above was a later rule. That is:

- (29)
- | | | |
|------------------------|----------------|----------------|
| | *...C"VCVC'VCV | *...C"V CVC'V: |
| PRETONIC VOWEL LOSS | ...CVCØC'V CV | ...CVCØC'V: |
| FINAL SHORT VOWEL LOSS | ...C'V CØCVCØ | |

In the examples below, stress is marked in both Pre-Proto Southern Vanuatu and Anejoṃ (representing SV languages) to illustrate the operation of this rule; a long dash indicates vacuous application of a rule.¹²

- (30)
- | | | | |
|-----------------|---------------|--------------|-------------|
| Pre-PSV | *"na-li'ma-ñā | *"e-ta'ma-gu | *"a-ke'li-i |
| PALATALISATION | nijmaña | etamagu | akejii |
| PRETONIC V LOSS | nijmaña | etmagu | akjii |
| FINAL V LOSS | nijmañ | etmag | — |
| Anejoṃ | 'nijman | 'etmak | ac'jii |
| | 'his hand' | 'my father' | 'dig it' |

When the consonants on either side of the pretonic vowel were identical, then one was lost (presumably via gemination). Compare the following:

- (31)
- | | | |
|-----------------|----------|---------------|
| Pre-PSV | *a-'susu | *"nà-su'su-na |
| PRETONIC V LOSS | — | nassuna |
| FINAL V LOSS | a-sus | nassun |
| Anejoṃ | 'eded | 'naden |
| | 'suck' | 'her breast' |

New Caledonia

A similar rule operated in New Caledonian languages. Geraghty (1989a:149) says that it only operated between identical consonants, producing geminates which then became aspirated (if stops) or voiceless (if sonorants) – known as “hard” consonants in the NC literature. The examples in (32) show the “normal” development of *k, *p and *n in Nemi (representing New Caledonian languages), while those in (33) show the development of “hard” consonants through vowel loss and gemination (Haudricourt & Ozanne-Rivierre 1982):

¹² The Pre-Proto SV forms given here (and the Pre-Proto NC ones below) are basically Proto Oceanic roots with various accretions or affixes, some of POc origin, others more recent. However, I have parenthesised the final consonant of a POc noun root when it is followed by a consonant-initial possessive suffix, since it is likely that root-final consonants were lost in this environment, even though they may have been retained in others (Malcolm Ross pers. comm.).

- | | | | |
|------|----------------------|---------------|------------------------|
| (32) | Pre-PNC | Nemi | |
| | * <i>ku'li(t)-ñā</i> | <i>cii-n</i> | 'his/her skin' |
| | * <i>'patu</i> | <i>paik</i> | 'stone |
| | * <i>na'tu-ñā</i> | <i>nai-n</i> | 'his/her child' |
| (33) | Pre-PNC | Nemi | |
| | * <i>ku'ku-ñā</i> | <i>hi-n</i> | 'his/her finger(nail)' |
| | * <i>pa'pa-ñā</i> | <i>hwa-n</i> | 'his/her mouth' |
| | * <i>na'na(q)-ñā</i> | <i>hnaa-n</i> | 'his/her pus, snot' |

However, there is evidence that the vowel loss rule also applied to pretonic vowels between non-identical consonants – especially to a vowel between a stop and a nasal; for example:

- | | | | |
|------|-------------------|---------------|------------------|
| (34) | Pre-PNC | Nemi | |
| | * <i>qe'no-</i> | <i>kno-</i> | 'laid down' |
| | * <i>ta'ma-ñā</i> | <i>tnau-n</i> | 'his/her father' |
| | * <i>ti'na-ñā</i> | <i>tne-n</i> | 'his/her mother' |

South Efate

Word-medial vowel loss also occurs in South Efate. Clark (1985a:20), however, describes the operation of this rule in quite different terms from the process described for SV and NC languages. According to his analysis,

- (i) the final vowel loss rule **preceded** the medial vowel loss rule (though descriptions of SV languages at least have the reverse order);
- (ii) the rule, which applies from right to left, deletes a vowel before a single consonant followed by a vowel, irrespective of the position of stress (and so a stressed vowel may be deleted); but
- (iii) the rule does **not** apply to the low vowel *a*.

His word-medial vowel deletion rule is:

- (35) V > Ø / C__CV
 [-low]

The examples he gives to illustrate the operation and sequencing of these rules involve the Proto Efate forms **nasuñā* 'house', **nasama* 'outrigger', **napati-gu* 'my tooth' and **nakini-gu* 'my finger':

- | | | | | | |
|------|--------------------|-----------------|-----------------|--------------------|--------------------|
| (36) | Proto Efate | * <i>nasuñā</i> | * <i>nasama</i> | * <i>napati-gu</i> | * <i>nakini-gu</i> |
| | DISSIMILATION | — | <i>nesema</i> | <i>nepatigu</i> | — |
| | FINAL V LOSS | <i>nasuñ</i> | <i>nesem</i> | <i>nepatig</i> | <i>nakinig</i> |
| | MEDIAL V LOSS | — | <i>nsem</i> | <i>npatig</i> | <i>naknig</i> |
| | S. Efate | <i>nasuñ</i> | <i>nsem</i> | <i>npatik</i> | <i>naknik</i> |

Cognates in Nakanamanga, in which these rules do not operate, are:

(37)	Proto Efate	Nakanamanga
	* <i>nasuṃa</i> 'house'	<i>nasuṃa</i>
	* <i>nasama</i> 'outrigger'	<i>nasama</i>
	* <i>napati-gu</i> 'my tooth'	<i>napati-ŋu</i>
	* <i>nakini-gu</i> 'my finger'	<i>nakini-ŋu</i>

3.2.3 Vowel loss: a reinterpretation

There is, however, another way of looking at both the SM and the South Efate data which suggests that these processes are far more similar than they first appear.

I will deal with South Efate first. It is possible that a set of rules partially different from those proposed by Clark operated in South Efate which, for purposes of this discussion, I presume had regular penultimate stress.¹³ The following set of rules, which I suggest applied in the order given below, is proposed as an alternative:

- (38)a. Dissimilation of **a* (as above).
- b. Article Reduction (see below).
- c. Medial – i.e. pretonic – vowel loss. This is identical to the Proto SM rule except that it did not apply to *a*.
- d. Final short vowel loss (as above).

The proposed Article Reduction rule deleted the vowel from the accreted article, except if that vowel was *a*: i.e. *na-* remained *na-*, but *nV-* (where *V* is not *a*) became *n-*.

The application of these rules to the same set of forms as in (36) above, where stress is now marked, is shown below:

(39)	Proto Efate	* <i>na'suṃa</i>	* <i>na'sama</i>	* <i>napa'ti-gu</i>	* <i>naki'ni-gu</i>
	DISSIMILATION	—	<i>ne'sema</i>	<i>nepa'tigu</i>	—
	ART. RED.	—	<i>n'sema</i>	<i>npa'tigu</i>	—
	MEDIAL V LOSS	—	—	—	<i>nak'nigu</i>
	FINAL V LOSS	<i>nasuṃ</i>	<i>nsem</i>	<i>npatig</i>	<i>naknig</i>
	S. Efate	<i>nasuṃ</i>	<i>nsem</i>	<i>npatik</i>	<i>naknik</i>

The only differences between this set of ordered rules and those described above for Southern Vanuatu at least are (i) the Article Reduction rule, and (ii) the fact that a non-final *a* is never deleted.

There is in fact fairly clear evidence that the Article Reduction rule also applied in Southern Vanuatu. Its operation is most transparent in Sye and Anejoŋ. Sye permits the following noun-initial clusters: *nm*, *np*, *nr*, *nt*, *nv* and *ny*.¹⁴ In all cases which I have examined from Crowley's dictionary (in preparation,) the vowel of the article is lost when the vowel in the first syllable of the noun is **a*. Examples:

¹³ Clark (1985a:17-19) says that word stress in the Nguna dialect is antepenultimate, but "evidence on the other dialects is not so clear". Development of antepenultimate stress in some or all Efate communalects may in any case have been a later development, since most of Efate's closerelatives have penultimate stress.

¹⁴ Underlying *nr* is orthographically *nd*. There are other initial consonant clusters in Sye as well (like *mr*, *pr*, *kt*) which also seem to derive from earlier initial **CaCa*; however, I am specifically interested here in comparing similar forms, with the accreted article **na*.

(40)	Proto Oceanic	Sye
	<i>*maRi</i> 'breadfruit'	<i>n/mar</i>
	<i>*baga</i> 'banyan'	<i>n/pag</i>
	<i>*draRaq</i> 'blood'	<i>n/re</i>
	<i>*talos</i> 'taro'	<i>n/tal</i>
	<i>*patu</i> 'stone'	<i>n/vat</i>
	<i>*yaRu</i> 'casuarina'	<i>n/yar</i>

Compare:

(41)	Proto Oceanic	Sye
	<i>*kutu</i> 'louse'	<i>no/cut</i>
	<i>*puaq</i> 'fruit'	<i>no/vwa-</i> 'seed'
	<i>*kurat</i> 'Morinda citrifolia'	<i>no/crat</i>
	<i>*lima</i> 'hand'	<i>ne/lman</i> 'outrigger'
	<i>*molis</i> 'citrus'	<i>ne/mli</i>
	<i>*piRaq</i> 'k.o. taro'	<i>ne/vie</i> 'water taro'

This suggests very strongly that the **a*-dissimilation rule applied to the vowel of accreted **na*, which became *ne-* and was then subject to loss of the vowel. Presumably, the assimilatory processes which applied to **na* in (41) derive from some later rule. Thus:

(42)	Proto Oceanic	<i>*na-patu</i>	<i>*na-kutu</i>
	DISSIMILATION	<i>ne-patu</i>	—
	ART. REDUCTION	<i>n-patu</i>	—
	ASSIMILATION	—	<i>no-kut</i>
	PRETONIC V LOSS	—	—
	FINAL V LOSS	<i>n-pat</i>	<i>no-kut</i>
	Sye	<i>nvat</i>	<i>nocut</i>
		'stone'	'louse'

In Anejoñ, some nouns show accretion of *nV-*, as in (43)a, others show accretion of *in-*, like those given in (43)b:

(43)	Proto Oceanic	Anejoñ
a.	<i>*kutu</i> 'louse'	<i>ne/cet</i>
	<i>*pudi</i> 'banana'	<i>no/hos</i>
	<i>*lipon</i> 'tooth'	<i>ne/lve-</i>
	<i>*Rumwaq</i> 'house'	<i>n/ioñ</i>
	<i>*lisa</i> 'nit'	<i>na/lad</i>
b.	<i>*patu</i> 'stone'	<i>in/hat</i>
	<i>*talos</i> 'taro'	<i>in/tal</i>
	<i>*baga</i> 'banyan'	<i>in/pak</i>
	<i>*laje</i> 'coral'	<i>in/las</i>
	<i>*kayu</i> 'tree'	<i>in/cai</i>

Now surface noun-initial *in-* is underlying *n-* – i.e., *intal* ‘taro’ is phonemically /ntal/ – with the /i/ being inserted by a regular morphophonemic rule which prevents the generation of word-initial consonant clusters.¹⁵ Once again, most cases of *in*-initial nouns derive from Proto Oceanic roots where the first vowel is **a*, while most cases of *nV*-initial nouns derive from POC forms whose first vowel was not **a*, as the data in (43) show. Thus the same process appears to be at work here.

Apparent cases of *nə-* initial nouns in Tanna languages admit of a similar explanation. There is a regular rule in Lenakel, for example, which inserts /ə/ between the members of an underlying word-initial two-consonant cluster; this /ə/ does not occur when these words take a prefix. For example:

- (44) **Lenakel**
- | | | |
|---------------|-----------|-----------------|
| <i>nəsiin</i> | /n-sii-n/ | ‘his excrement’ |
| <i>nəkom</i> | /n-kom/ | ‘fire’ |
- but
- | | | |
|---------------------|-----------------|----------------|
| <i>nəmwa-nəsiin</i> | /n-mwa-n-sii-n/ | ‘his buttocks’ |
| <i>le-nkom</i> | /le-n-kom/ | ‘in the fire’ |

Once again, it appears that **na-* reduced to **n-* in Tanna when the following vowel was *a*, with the resultant consonant cluster being broken up by the insertion of *ə*.

As will be seen in §4.1 below, New Caledonian languages also accreted the article. There, however, not only was the vowel lost in all cases, but the resultant *n* + consonant developed into a prenasalised consonant, indicating that the same process was once again at work.

Discussion

There appears to have been an ordered set of rules which was shared by South Efate, Proto Southern Vanuatu and Proto New Caledonian. The rules involved are similar enough to suggest a common origin, although further investigation of the historical phonologies of these languages is necessary. The hypothesis here is that this was a **single** rule, which applied in what I will refer to in §5.1 below as the **Efate-Southern Melanesian linkage**.

Pretonic or word-medial vowel loss also occurs in a number of NCV languages to the north of Efate. However, its occurrence is more sporadic, or less thoroughgoing, than it is in the Southern Melanesian languages and in South Efate. And just as with word-final vowel loss, it does not occur to anywhere near the same extent in South Efate’s closest relatives in North Efate, the Shepherds and Epi, suggesting that it was an unrelated process.

4 The Southern Oceanic hypothesis

The Southern Oceanic hypothesis states that the Southern Melanesian and North-Central Vanuatu families have a single and unique common ancestor, Proto Southern Oceanic (PSO). The evidence presented below is not overpoweringly compelling, but it does suggest that the hypothesis is worthy of further and closer investigation.

¹⁵ This same rule, for example, applies when the echo-subject marker *m-* (cf. §2.1 above) is prefixed to a consonant-initial morpheme: thus *m-amjeg* (E S-sleep) ‘and sleeps/slept’, but *im-tas* (E S-talk) ‘and says/said’.

4.1 Article accretion

Central and Southern Vanuatu

Southern Vanuatu languages and most Central Vanuatu languages have accreted the Proto Oceanic common article **na* to the noun.¹⁶ Many of the examples in the previous section illustrate this, and there is little need to elaborate here. Perhaps what does need to be briefly discussed, however, is how firmly attached to the noun the accreted article is.

In most SV languages, the article can almost never be removed. It is sometimes deleted in compounds in Sye (e.g. *ompi* 'do' + *nurac* 'thing' > *ompurac* 'work', for example), while in Tanna it seems to be deleted only in the so-called valued possession construction:

(45) **Lenakel**

taha-k nau
POSS-1SG knife
'my knife'

ta-k au
POSS-1SG knife
'my favourite knife'

In Anejoñ, however, the accreted article is less bound. It is regularly deleted when the noun is non-singular indefinite,¹⁷ and also in non-initial elements of compounds:

(46) **Anejoñ**

<i>nelcau</i> 'canoe'	<i>elcau</i> 'canoes'	<i>nev-elcau</i> 'which canoe?'
<i>natimi</i> 'person'	<i>elpu-atimi</i> 'people'	<i>nef-atimi</i> 'an old or important person'
<i>incai</i> 'tree'	<i>cai</i> 'trees'	<i>nariram-cai</i> 'k.o. banana'

In those CV languages which have article accretion, the article is often removed in compounds or in contexts similar to those mentioned above for Anejoñ. Crowley (1985:152) shows that in the Nguna dialect of Nakanamanga, *na-* is dropped from both *na-* initial forms in compounds: *namata* 'eye' + *namaloku* 'kava' > *mata-maloku* 'drunkenness'. In Port Sandwich, accreted *nV-* is deleted

when the noun phrase is generic rather than specific...when the noun is accompanied by a determiner of some kind...[and] when the noun appears in a compound

(Crowley 1985:153-154)

For example:

(47) **Port Sandwich**

Narbaix e-cav-i mbuangg.
ART:woman 3SG-slice-TR taro
'The woman sliced the taro.'

Rbaix e-cav-i mbuangg.
woman 3SG-slice-TR taro
'Women slice taro.'

¹⁶ In SV at least, this accretion does not take place with most directly possessed kin terms and with some names of higher animates.

¹⁷ This even applies to some loanwords in which initial *n* was part of the word in the source language: thus *aifi* is the indefinite non-singular of *naifi* 'knife'.

Rbaix *Amansumbon* *e-lum-i* *mbuangg*.
 woman Amansumbon 3SG-plant-TR taro
 'Amansumbon's wife planted taro.'

Article-accretion is not universal in the CV subgroup: the languages of Ambrym and Epi have no preposed articles, nor do they show much evidence of having accreted a reflex of **na* noun-initially. However, Early (1994:106-107) notes that in Lewo there are some forms that appear to retain an earlier article (POc **na*) as part of their synchronic form ...[although] it no longer functions as a full article on Epi.

He gives as examples *none* (< POc **qone* 'sand'), and also the variation between *nompui* and *pui* 'pig'. The form *na-* does occur in Lewo as a nominaliser (with or without suffixed *-ena*), a fairly common pattern in Vanuatu.

New Caledonia

The New Caledonian languages do not show obvious article accretion like their relatives in central and southern Vanuatu, nor do there appear to be reflexes of **na* as articles which may have separated from the noun in these languages.¹⁸ However, there is some evidence that Proto NC may have had accreted articles:

The oldest and most productive source of nonetymological prenasalized consonants in the languages of New Caledonia, as elsewhere in Oceanic, has been the prenasalization of oral consonants by progressive assimilation of clitics with an NV [nasal + vowel] shape, particularly the earlier common article **na*.

This process must have remained productive after the languages began to separate off, in view of the doublets and irregular correspondences illustrated [below].

(Ozanne-Rivierre 1992:200).

A few of her examples, together with additional data, are presented in (48) below; the forms following "but" on the second line in each case show no prenasalisation.

(48) Proto Oceanic

<i>*pulu</i>	'body hair'	Drehu <i>pen/e</i> , Nengone <i>din</i> but Kumak <i>pōlē-</i> , Nemi <i>puni</i> , Iaai <i>le/ün</i>
<i>*qauR</i>	'bamboo'	Nyelāyu <i>ngao</i> , Kumak <i>ngaa</i> , Jawe <i>ngo</i> but Cèmuhî <i>ō</i> , Drehu <i>aw</i>
<i>*susu</i>	'suck, breast'	Nemi <i>ndit</i> 'breast', Xârâcùù <i>njii</i> 'suck' but Nemi <i>tit</i> 'suck', Drehu <i>iði</i>
<i>*tali</i>	'rope'	Pije <i>ndan</i> , Jawe , Nyelāyu <i>njan</i> but Iaai <i>te/keny</i> , Nengone <i>wa/cen</i>

We can take this argument a little further by looking again at the languages of Hienghène. POc initial **t* is generally reflected as *t* (Jawe *c*) before **a* and as *c* elsewhere, while **d* (phonemic /nt/) is reflected as *d* (Jawe *j*) before **a* and as *j* elsewhere. Verbs and directly possessed kin terms which were **t*-initial show the expected pattern:

¹⁸ Ozanne-Rivierre (1995:51), however, notes that "**na* is still found today as a noun subject marker in a small number of languages", like Ajië and Cèmuhî. See also the earlier brief discussion of this topic in Geraghty (1989b:98).

(49)	POc	Pije	Jawe	
	<i>*taci</i>	<i>tali-</i>	<i>cali-</i>	'younger sibling'
	<i>*tama-</i>	<i>tama-</i>	<i>cnau-</i>	'father'
	<i>*tunu</i>	<i>cini</i>	<i>cini</i>	'burn'
	<i>*tupa</i>	<i>civa</i>	<i>civa</i>	'poison (fish)'
	<i>*tuqur</i>	<i>tuut</i> ¹⁹	<i>cuut</i>	'stand'

However, other *t*-initial nouns behave as if they were *d*-initial:

(50)	POc	Pije	Jawe	
	<i>*taku</i>	<i>dai-</i>	<i>jai-</i>	'back'
	<i>*tali</i>	<i>dan</i>		'rope'
	<i>*tasik</i>	<i>dalik</i>	<i>jalik</i>	'sea'
	<i>*turu</i>	<i>jili-</i>	<i>jili-</i>	'knee'
	<i>*tian</i>	<i>jia-</i>	<i>jie-</i>	'stomach'

This suggests that, while the verbs and kin terms were **t*-initial, other nouns began with **d* (< **n-t*).

We do not find this pattern occurring with **k*-initial nouns in these languages, but in any case **k* and **g* appear to have merged, so we would not expect to find any evidence. However, **p* and **b* have not merged, and yet this pattern does not occur there either: e.g. **paka-* > Pije, Jawe *pa-* 'causative prefix', **patu* > Pije, Jawe *paik* 'stone', but **boni* > Pije, Jawe *gen* 'night'. It may be that **n-p*, rather than yielding **m-p* (i.e. **b*), simply underwent cluster simplification.

The **t*/**d* variation illustrated in (49) and (50) might be explained as just another example of oral/nasal grade crossover, were it not for the very high correlation between reflexes of **d* with non-kin nouns and reflexes of **t* with other roots, paralleling the situation in SV languages where kin terms constitute the main exception to an otherwise general rule of article accretion. Despite the lack of evidence relating to other consonants, this suggests that Ozanne-Rivierre is correct: i.e. that NC languages had accreted articles.

Northern Vanuatu

The situation in the NV languages is quite different. In Mwotlap (alias Motlav), spoken on Mota Lava in the Banks Is., *nV-* occurs prefixed to most nouns, but must be removed in certain restricted contexts – e.g. (i) after a possessed noun, a pronominal number marker or collective noun or a bound preposition, (ii) in a compound, and (iii) after the partitive prefix *te-* (Crowley forthcoming). An examination of the lists in Tryon (1976) shows that the only other NV language which has anything like frequent article accretion to nouns is Wetamut (Dorig), spoken on Gaua Island (also in the Banks). Given the large geographical gap between these two languages and those of the CV subgroup, this almost certainly represents an independent development.

¹⁹ Haudricourt and Ozanne-Rivierre (1982:41) state that Pije *tuut* 'stand' for expected *cuut* is one of only a couple of exceptions to the palatalisation rule; in any case, it is not relevant to the argument here.

Summary

Article accretion does not appear to have been a part of Proto Northern Vanuatu historical morphosyntax. It does, however, appear to have been widespread in Central Vanuatu, Southern Vanuatu and New Caledonia, suggesting that these languages may have formed a genetic unity at one time.²⁰

4.2 Other morphosyntactic evidence

4.2.1 Development of the locative preposition

In (1)d-(1)f above, I listed Clark's (1985b:208) proposed innovations relating to the development of the locative preposition in PNCV: POc **i* became PNCV **a*, POc **i lalo* 'LOC inside' fused as PNCV **(a)lo* 'LOC'.

In Southern Vanuatu languages, the form of the locative/oblique preposition which governs nouns and noun phrases differs from that which governs pronouns (which occur as possessive suffixes):

(51)	Governing NPs	Governing pronouns
Sye	<i>ra</i>	<i>ira-</i>
Whitesands	<i>ie</i>	<i>la-</i>
Lenakel	<i>le</i>	<i>la-</i>
S.W. Tanna	<i>ie</i>	<i>ila-</i>
Kwamera	<i>ia</i>	<i>ira-, ianira-, ian-</i>
Anejoñ	<i>a</i>	<i>era-</i>

In order to interpret these data, we need to examine the relevant sound correspondences in these languages; the situation **appears** to be as shown below; the environment "adjacent to POc **i*" is to be interpreted as /__**i* and /**i*__ in Whitesands and Lenakel, but only as /__**i* in Anejoñ.

(52)	Adjacent to POc <i>*i</i>		Elsewhere	
Proto Oceanic	<i>*l</i>	<i>*r</i>	<i>*l</i>	<i>*r</i>
Sye	<i>l</i>	<i>r</i>	<i>l</i>	<i>r</i>
Whitesands	<i>l</i>	<i>l</i>	<i>i</i>	<i>i</i>
Lenakel	<i>l</i>	<i>l</i>	<i>i</i>	<i>i</i>
S.W. Tanna	<i>l</i>	<i>l</i>	<i>l</i>	<i>l</i>
Kwamera	<i>r</i>	<i>r</i>	<i>r</i>	<i>r</i>
Anejoñ	<i>j</i>	<i>r, -Ø</i>	<i>l</i>	<i>r</i>

The SV languages may well have made the same innovations as the NCV languages, but have subsequently taken different directions. The reconstruction of **ira-* as the form governing pronouns is unproblematic, initial *i* subsequently being lost in Whitesands and Lenakel. With the form governing NPs, however, there are some problems. Sye and

²⁰ We still need to explain why the languages of Ambrym and Epi generally do not show this innovation. Article accretion may have been a change in progress, rather than a wholly accomplished fact, at the time that putative Proto Nuclear Southern Oceanic began to break up: the preposed article may have become more and more closely attached to the noun as an enclitic, but perhaps it was not fully and irrevocably bound to the noun. The Ambrym and Epi languages may thus have subsequently undergone a change in which the article was reanalysed as a nominaliser (Epi), or was lost altogether (Ambrym).

Whitesands suggest **ra*, Anejoñ suggests **a*. Lenakel *le* may be a back-formation from the pronominal form. The *i*-initial forms in Southwest Tanna and Kwamera may be either the result of influence from a northern lect (Whitesands, for example), or they may reflect **i* 'locative' + **a* 'locative'. Thus while there appear to be a number of similarities between SV and NCV here, there do not seem to be a set of **identical** developments.

In New Caledonia, the Hienghène languages generally have *a* (< **a*?) as the locative preposition. Ajië *na* 'to, towards' and Iaai *hnyi* 'in, on, at' (< **la*?) also appear to confirm that the NCV innovation occurred in Proto New Caledonian, though further data are needed.

4.2.2 Development of pronominal forms

A number of innovations in various pronominal forms in PNCV or PCV were discussed above. These are repeated here:

- (53)a. POc **-mu* 2SG possessive suffix replaced by PNCV **-mwa* (= (1)a).
- b. POc **koe* 2SG independent pronoun replaced by PNCV **ni(kg)o* (= (1)b).
- c. POc **(kg)u* 1SG subject pronoun replaced by PNCV **na* (= (1)c).
- (54)a. POc **inau* 1SG independent pronoun becomes PCV **(kg)inau* (= (3)b).
- b. PNCV **ni(kg)o* 2SG independent pronoun (see (1)b above) replaced by PCV **(kg)aigo* (= (3)c).

Of these, (53)c and (54)a have no parallels in SM languages, and thus remain uniquely NCV and CV innovations respectively. The others, however, require comment.

PNCV **-mwa* 2SG possessive pronoun

Innovation (53)a suggests that the POc second person singular possessive pronoun **-mu* was replaced by PNCV **-mwa*. However, because of the loss of the final vowel in many NCV languages, the form with the final *a* thus to be found only in Mota, Lewo, Nakanamanga and Baetora (Clark 1985b:207, though the final vowel also occurs in Paamese *-mo*):

the evidence for the change (or lack of it) is thus reduced to the difference between a labial and a labiovelar nasal, a distinction which is lost in some languages, and which cannot be reliably extracted from most available descriptions, particularly in final position. (Clark 1985b:207).

Clark further notes (1985b:207) that the two languages of Ambae have *-mu* rather than *-mwa*. While it is possible that *-mu* in these languages derives from **-mwa* (via ***mua*), it is equally possible that PNCV retained **-mu*; this form may have been in the process of changing to **-mwa*, but that change may not have been complete.²¹

The basic form of the 2SG possessive pronoun in all Southern Melanesian languages appears to be *-m*, except that Anejoñ has *-m̃*. Although there is contrast between Anejoñ *m* and *m̃* word-finally, this is not of much assistance, since *m̃* derives not only from **mw*

²¹ Capell (1971:59) notes that in Arosi (South-East Solomons), a final *a* may be added to possessive pronouns suffixed to the general possessive marker "without change of meaning": thus *a-gu*, *a-gu-a* "my", *a-mu*, *a-mu-a* "your (sg.)", etc. This may possibly explain the development of PNCV **-mwa* and, if it is the explanation, serves to link NCV with South-East Solomons.

(**Rumwaq* > *n/ioṃ* ‘house’), but also from **m* before **u*, whether or not that **u* was later lost (**ṇamuk* > *in/yaṃ* ‘mosquito’).

Although *-m* is the commonest form of this possessive suffix in Sye, a few nouns show *-mu* in a particular morphophonemic context: e.g. *nelve-* ‘tooth’ has *nelpmu* ‘your tooth’ for expected ***nelvom*.²² This suggests that the innovation may not have taken place in SV languages at least, and that *-m* in these languages derives from **-mu* rather than from **-mwa*. The situation is thus somewhat confused. Bearing in mind the earlier discussion, this does not seem to be strong evidence for the NCV family either.

PNCV **ni(kg)o*, PCV *(*kg*)aigo, 2SG independent pronoun

Clark suggests that the POc 2SG independent pronoun **ko(e)* was replaced by PNCV **ni(kg)o* (innovation (53)b), which later became PCV *(*kg*)aigo (innovation (54)b).

Erromango appears to be alone among SM subgroups in sharing the CV innovation: e.g. Sye *kik*. Other SV languages reflect **i-ko(e)* (Lenakel *iik*, Anejoṃ *a/ek*). However, they do have forms possibly derivable from **ni(kg)o* as 2SG subject markers: all Tanna languages except Kwamera have *n-* marking second person subject, and Anejoṃ has *na(i)* (2SG aorist). NC languages do not reflect the *n*-initial form in independent pronouns, nor do those that I have looked at have *nV* as a 2SG subject marker.

The evidence is not all that clear, but does show some links between SV and NCV.

4.3 Lexical innovations

Clark (1985b) also listed a number of putative lexical innovations in PNCV and its subgroups, involving either a phonological irregularity or else a replacement. Over time, some of these have been shown to have cognates in, for example, Solomon Islands languages, and thus no longer constitute PNCV innovations.

There are, however, a number of apparent irregular phonological developments shared by PNCV and PSV, some of these at least also being shared with NC languages (for which the necessary data are not all available). In the data below, I will give a tentative PSO form; I will then give the PNCV form, and one or two examples of cognates in SV languages (without at this stage giving a PSV reconstruction), and will comment where necessary on NC forms.

- | | |
|----------------------------------|---|
| (55) POc * <i>inum</i> ‘drink’ > | PSO * <i>munim</i>
PNCV * <i>muni</i>
SV: Lenakel <i>a/mnuumw</i> , Anejoṃ <i>a/ṃoṃ</i> |
| (56) POc * <i>asa</i> ‘scrape’ > | PSO * <i>rasa</i>
PNCV * <i>rasa</i>
SV: Kwamera <i>a/rəsi</i> |

²² There are other possible ways of accounting for *-mu* from underlying final *m* in this morphophonemic context, though they are somewhat ad hoc (Terry Crowley pers. comm.).

- (57) POc **tokon* 'crutch' > PSO **tikon*
PNCV **tiko*
SV: Lenakel *a/skən*, Anejoñ *i/sec* 'walk with crutch'
NC: Jawe *jek*, *jexe-* could derive from **tokon* or **tikon*
- (58) POc **katama* 'outside' > PSO **(k)atava*
PNCV **katava*
SV: Lenakel *i/atəv*
- (59) POc **kalo* 'ant, spider' > PSO **makal(ai)*
PNCV **makala*
SV: Whitesands *makali*, Kwamera *ka/mkəri*
- (60) POc **kaŋaRi* 'almond' > PSO **qaŋaRi*
PNCV **qaŋaRi*
SV: Whitesands *n/age*, Anejoñ *n/agai*
- (61) POc **kapat(ao)* 'wood-grub' > PSO **avato*
PNCV **avato*
SV: Sye *n/avat*, Anejoñ *n/ahat*
NC: Nemi *havo* suggests loss of **k-*
- (62) POc **Rumwaq* 'house' > PNCV **yumwa*
SV: Lenakel *n/imwa*, Anejoñ *n/ioñ*
NC: The initial syllable has been lost: Nemi *ŋa*, Kumak *mwa*
- (63) POc **kumi* 'chin', 'beard' > PNCV **kumwi*
SV: Whitesands *na/kmw-*, Lenakel *nə/kmw-*
- (64) POc **wakaR* 'root' > PNCV **kawa-ri*
SV: Anejoñ *necva-*
NC: forms such as Iai *wâân*, Xârâcùù *kwêe* are problematic, depending on which syllable has been lost.

5 Summary

The discussion in the previous sections has made the following suggestions:

First, there is evidence supporting the existence of a **Southern Melanesian** grouping, consisting of the Southern Vanuatu and New Caledonian families. This is defined on the basis of the development of the conjunction **ma* as an echo-subject marker (§2.1), shared irregular developments in the plural pronouns (§2.2), as well as some irregular phonological developments (§2.3). To use the terminology elaborated in Ross (forthcoming), this would be an **innovation-defined subgroup**, the product of **language fissure**: i.e. there was a single ancestral language, Proto Southern Melanesian, which split into two descendants, Proto Southern Vanuatu and Proto New Caledonian.

Second, there is evidence supporting the existence of what I will refer to as the **Efate-Southern Melanesian linkage**, consisting of the South Efate language and Proto Southern Melanesian. This is defined on the basis of the shared phonological rules relating to the development and loss of vowels discussed in §3.1 and §3.2 above. In Ross' terminology, this is an **innovation-linked subgroup**, the product of **lectal differentiation**. That is, the original chain of dialects (presumably spoken in the south of Efate) became more and more distant from one another, linguistically as well as geographically, until a point was reached where contact was lost.

Third, there is some evidence supporting the existence of a **Nuclear Southern Oceanic (NSO) linkage**, comprising the Central Vanuatu family and the Efate-Southern Melanesian Linkage. This consists of the accretion of the article (§4.1), and the shared development of the second person singular independent pronoun **(kg)aigo* in CV and Erromango (§4.2.2). This hypothesis is not particularly strong at this stage.

Finally, there is evidence supporting the existence of a **Southern Oceanic linkage**, comprising the Northern Vanuatu subgroup and the NSO linkage. This evidence consists of developments in the locative preposition (§4.2.1), the shared development of the second person singular independent pronoun **ni(kg)o* (§4.2.2), and certain irregular phonological developments in a number of lexical items (§4.3).

These interrelationships can be diagrammed as illustrated in Figure 1. (I use Ross' convention of a double line to indicate a linkage.)

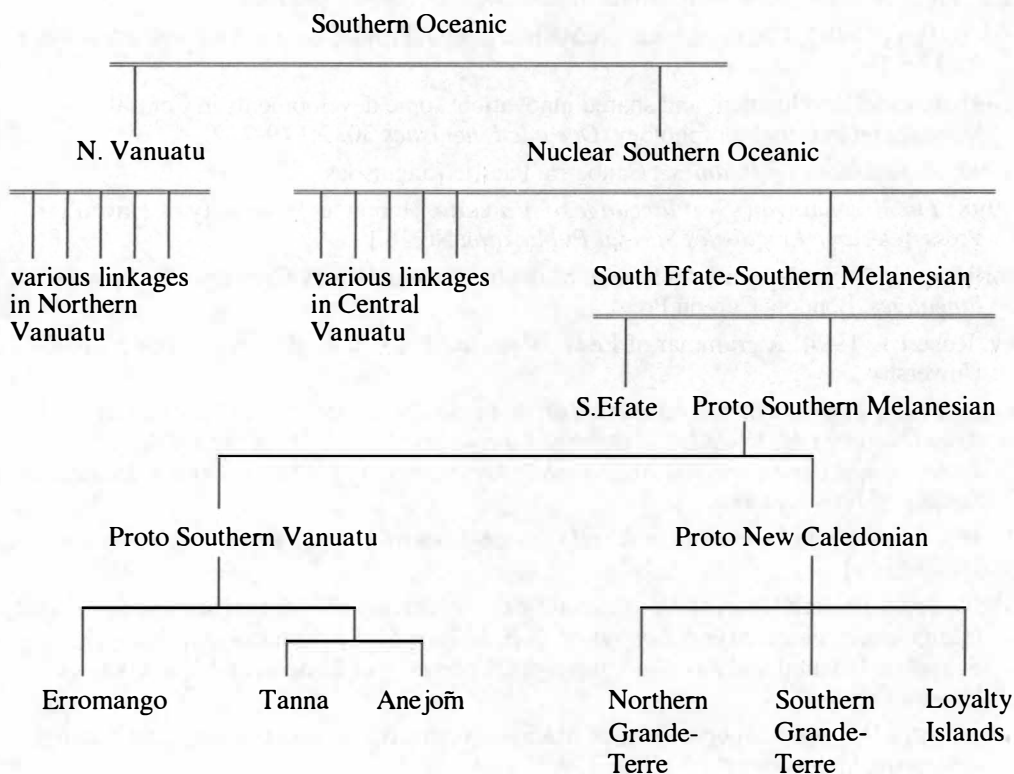


Figure 1

The position of the Central Pacific subgroup in relation to this proposal is one that needs to be investigated. It has been generally assumed that NCV's closest relatives within Oceanic are the Central Pacific languages. If the Southern Oceanic hypothesis is valid, NCV no longer exists as a discrete subgroup; and the relationship of Central Pacific to the Southern Oceanic grouping would thus need to be re-evaluated.

The hypotheses presented above are no more than indications at this stage. Clearly, a great deal of work needs to be done to clarify the historical phonology of the Southern Melanesian languages particularly, and the historical morphosyntax of all of the languages under discussion. The relationship of putative Southern Oceanic not only to the Central Pacific subgroup, but to Southeast Solomonian and Micronesian, also needs detailed investigation. I hope, however, that this paper will stimulate this research further.

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8 *How did Erromangan verbs get so messy?*

TERRY CROWLEY

1 Introduction¹

The existence of patterns of oral-nasal grade correspondences in the inflectional paradigms of verbs in many Central Vanuatu languages has been widely reported (Schütz 1968; Lynch 1975; Tryon 1986; Sperlich 1987; Crowley 1991). In these languages, a historically original nasal grade form of the root is generally associated with a variety of markers of realis inflectional categories.

Outside this subgroup, such patterns are rare. A similar sort of pattern is found in Raga (Walsh 1982). This is a Northern Vanuatu language, though it is located immediately to the north of the line separating languages belonging to the Northern and Central subgroups. Lynch (1975:94-95) also notes the existence of oral-nasal grade alternations in some of the Oceanic languages of the Morobe province on Papua New Guinea, though with these languages the nasal grade form of the root is typically associated with the expression of a variety of irrealis rather than realis categories.

Lynch (1975:94) also noted the existence of oral-nasal grade alternations in the forms of verb roots in Erromangan, which belongs in the Southern Vanuatu grouping of languages. None of the other languages of Southern Vanuatu exhibit any parallel patterns in their verbal morphology. Interestingly, the alternation patterns in Erromangan are more similar to the patterns found in Yabêm and Buang in Papua New Guinea than in the adjacent languages to the north, in that the nasal grade forms of the verb are typically associated with irrealis rather than realis categories. Lynch's explanation for the origin of the patterns in Yabêm, Buang and Erromangan involves the parallel phonological fusion of an earlier preverbal irrealis marker **na* with the following verb root.

¹ Many thanks to John Lynch and Bill Palmer for very helpful comments on earlier analyses that formed the basis for the paper, as well as to an earlier version of this paper. Responsibility for all final conclusions remains solely my own.

Since Lynch's original discussion, Lynch and Capell (1983) have gone further in providing a synchronic account of these phenomena in Erromangan. My own work on the language in the period 1994–95 allows for a more detailed account of the synchronic facts (Crowley 1998). At the same time, however, the more detailed synchronic data makes it more difficult to construct historical scenarios that will plausibly account for the inflectional behaviour of Erromangan verbs. Although it is difficult to find convincing evidence that Lynch's explanation is the correct one for Erromangan, I am forced to admit that I have no convincing alternative solutions to offer.

2 Distribution of basic and modified roots

Many verb roots in Erromangan undergo alternations in the shapes of their initial segments according to the nature of the preceding morphological environment. Such verbs, therefore, have two different shapes, which I will refer to as the "basic" root and the "modified" root respectively, following the terminology that has been fairly widely used in discussions of root alternation patterns in North Central Vanuatu languages.

Given the more restricted set of environments in which the modified forms of the root appear, perhaps the easiest way to begin the discussion of this process is to set out first of all the contexts in which the modified forms of the root appear. Corresponding to the basic form of the verb *alei* 'lie down' is the modified form *nalei*. This form appears after the following prefixes (where MR indicates that the verb appears in its modified root form, in contrast to its basic root form, which is marked as BR):

- (i) non-past tense markers. In the following examples, the verb *alei* 'lie down' carries future and present tense marking, and the verb appears in the modified form of the root, which has the shape *nalei*:

- (1)a. *yo-nalei*
3SG.FUT-MR.lie.down
'(s)he will lie down'²
- b. *yam-nalei*
3SG.PRES-MR.lie.down
'(s)he is lying down'

- (ii) echo subject markers in the present or future tense. Thus:

- (2) *m-nalei*
SG.FUT.ES-MR.lie.down
'...and (s)he will lie down'

2 Abbreviations:

BR	basic root	DESID	desiderative	OPT	optative
CAUS	causative	DISTPAST	distant past	PASTHAB	past habitual
COND	conditional	ES	echo subject	PL	plural
CONT	continuous	FUT	future	PRES	present
COUNT	counterassertive	IMP	imperative	RECPAST	recent past
DEPPAST	dependent past	MR	modified root	SG	singular

(iii) conditional markers:

- (3) *yapem-nalei*
 1SG.COND-MR.lie.down
 ‘if I lie down’

(iv) past habitual markers:

- (4) *yem-nalei*
 3SG.PASTHAB-MR.lie.down
 ‘(s)he used to lie down’

The basic root forms are those which appear in all other morphological contexts in which verb roots can appear in this language, these being the following:

(i) after imperative prefixes:

- (5)a. **Singular imperative**
 Ø-alei
 2SG.IMP-BR.lie.down
 ‘lie down!’
- b. **Plural imperative**
 w-alei
 2PL.IMP-BR.lie.down
 ‘all/both of you lie down!’

(ii) after any of the prefixes marking the recent past, distant past or dependent past. Thus:

- (6)a. *y-alei*
 3SG.RECPAST-BR.lie.down
 ‘(s)he (has just) lay down’
- b. *y-alei*
 3SG.DISTPAST-BR.lie.down
 ‘(s)he lay down’
- c. *yem-alei*
 3SG.DEPPAST.CONT-BR.lie.down
 ‘(while) (s)he was lying down’

(iii) after counterassertive prefixes:

- (7) *yakin-alei*
 1SG.COUNT-BR.lie.down
 ‘I can indeed lie down’

(iv) after optative prefixes, for example.

- (8) *p-alei*
 3SG.OPT-BR.lie.down
 ‘I wish that (s)he would lie down’

- (v) after echo subject prefixes for any of the inflectional categories just presented (which are all marked identically in their echo subject forms, in any case). Thus:

- (9)a. *m-alei*
2SG.IMP-BR.lie.down
'...and lie down!'
- b. *m̥la-alei*
PL.DISTPAST.ES-BR.lie.down
'...and we all lay down (some time ago)'

- (vi) after any derivational prefix. Thus, from the basic root of the verb *avan* 'walk' (which has the modified root *navan*) it is possible to add the instrumental prefix (*w*)*or-* to derive (*w*)*or-avan* 'shoes', or the nominalising prefix *n-* to derive the form *n-avan* 'walking, a walk, a trip'.

- (vii) after reduplicated segment of a root. Thus, *alou* 'run' – which has the modified root *nalou* – reduplicates as *alow-alou* 'run all over'.³ It should be noted that even if the reduplicated verb appears in an environment requiring the modified form of the root, only the initial segment is affected. Thus, the reduplicated form of the modified root *nalou* is *nalow-alou*, and not **nalou-nalou*.

- (viii) after a root to which a second verb is phonologically bound. Thus, the bound verb *ovyu-* 'desiderative' can be phonologically attached to *alei*, which appears in its basic root, whether the form *ovyu-* appears in its basic or its modified root form:

- (10) *yam-ovy-alei*⁴
1SG.DISTPAST-BR.DESID-BR.lie.down
'I wanted to lie down'

- (ix) in the causative construction, where the verb appears in a completely uninflected free form state after an inflected causative verb:

- (11) *y-ov-kik* *alei*
3SG.DISTPAST-BR.CAUS-2SG lie.down
'(s)he lay you down'

- (x) when the verb appears as the second member of a compound noun. Thus, from the verb *ayur* 'wilt' – which has the modified root *nayur* – we can derive the following compound noun:

- (12) *neimah ayur*
cassia wilt
'sensitive grass (*Mimosa pudica*)'

From the examples just presented, it may appear that the accretive *n-* in the form *nalei* should not be analysed as part of the root itself, but as part of the subject-tense prefix, followed by an invariant root, or that it may be a separate prefix altogether, expressing a separate meaning of its own. Thus, the form that I segmented above as *yo-nalei* '(s)he will lie down' could be segmented alternatively as either *yon-alei* or *yo-n-alei*. As a putative meaning,

³ The shift from *u* to *w* in this environment is predictable according to the general morphophonemic rules of the language.

⁴ The loss of the final vowel in *ovyu-* is also predictable according to the general morphophonemic rules.

we could suggest that *n-* might express some kind of general irrealis category, though the appearance of this form with the past habitual and the present would be problematic in this regard.

However, there is compelling evidence that there is in fact a genuine alternation between two different shapes of the root, i.e. *alei/nalei*. There are two major classes of verbs in Erromangan, which I refer to as “weak” verbs and “strong” verbs, with the examples presented above belonging to the class of weak verbs, in which root modification is manifested by the addition of *n-* before the root itself. With strong verbs, however, root modification involves a change in the shape of the verb-initial segments themselves, rather than the addition of a prothetic element. Exactly the same sorts of conditions which determine the choice between the root forms *alei/nalei* ‘lie down’ also determine the distribution of the root forms *ehri/ahri* ‘split’ and *oyol/anʒkol* ‘dig’, as illustrated by the following examples:

- (13)a. *y-ehri*
3SG.DISTPAST-BR.split
‘it split’
- b. *yam-ahri*
3SG.PRES-MR.split
‘it is splitting’
- c. *y-oyol*
3SG.DISTPAST-BR.dig
‘(s)he dug’
- d. *y-anʒkol*
3SG.FUT-MR.dig
‘(s)he will dig’

3 The shapes of modified roots

So far, I have only hinted at the formal nature of the root modification process, and root modification is clearly varied in its manifestation. This process involves, in part, the addition of a nasal segment before either the first or second segment of the verb root. Only certain segments appear in modified root environments with a preceding nasal, while other segments cannot be prenasalised. Those segments that are open to prenasalisation in modified root environments are the following:

- (i) any stop, *p, t, k*
- (ii) the two voiced fricatives, *v, ɣ*
- (iii) any vowel, *i, e, a, o, u*
- (iv) the rhotic *r*.

The remaining segments, which remain unprenasalised in modified root environments, are the following:

- (i) any nasal, *m, n, ŋ*
- (ii) the two glides, *y, w*
- (iii) the two voiceless fricatives, *s, h*
- (iv) the lateral *l*.

Such roots are therefore invariant in all morphosyntactic contexts. It should be noted, however, that these categories of verbs constitute a minority of verbs in the language, as the vast majority of verbs begin with those segments which do mutate.

The details of the particular ways in which prenasalisation is manifested in modified root environments with each of those segments that are amenable to this process is dependent on the classification of verbs into the two major classes of weak and strong verbs, to which I referred above.

3.1 Weak verbs

About three quarters of verbs in my Erromangan corpus can be assigned to the class of weak verbs. This category consists of all verbs which begin with the glides, *y-* and *w-*, as well as all verbs which begin with alveolar consonants, *s-*, *l-*, *r-* and *t-*. This group also consists of all verbs that begin with non-mid vowels, *a-*, *i-* and *u-*. Of the remaining verbs, i.e. those which begin with either of the mid vowels *e-* and *o-*, about a third belong in this category of weak verbs, while the remaining two thirds are strong.

Weak verbs are all characterised by the fact that roots beginning with one of those segments described above as being amenable to prenasalisation simply add an accretive *n-* at the beginning of the basic form of their underlying roots in order to produce the appropriate modified root form. Thus, the alternation between *alei/nalei* 'lie down' that was illustrated above is an example of a weak alternation. Roots beginning with *s-*, *l-* and the glides *y-* and *w-* remain invariant in all morphological contexts as these segments are not amenable to prenasalisation, also as indicated above. We therefore find correspondences in form such as those in Table 1, where the third person singular future form illustrates root-initial mutation with those verbs that have separate modified forms of the root.

Table 1: Weak verb modification patterns.

Basic root		3SG.FUT	
<i>tovop</i>	'laugh'	<i>yo-ntovop</i>	'(s)he will laugh'
<i>avan</i>	'walk'	<i>yo-navan</i>	'(s)he will walk'
<i>esomsay</i>	'breathe'	<i>yo-nesomsay</i>	'(s)he will breathe'
<i>itīs</i>	'smile'	<i>yo-nītīs</i>	'(s)he will smile'
<i>omonki</i>	'drink'	<i>yo-nomonki</i>	'(s)he will drink'
<i>uri</i>	'follow'	<i>yo-nuri</i>	'(s)he will follow'
<i>yep</i>	'descend'	<i>yo-yep</i>	'(s)he will descend'
<i>wai</i>	'step on'	<i>yo-wai</i>	'(s)he will step on'
<i>somponj</i>	'snore'	<i>yo-somponj</i>	'(s)he will snore'
<i>lau</i>	'dry'	<i>yo-lau</i>	'(s)he will be dry'

3.2 Strong verbs

While about three quarters of verb roots undergo root modification according to the weak pattern just described, the remaining quarter of verbs undergo a separate set of root modification patterns which I have chosen to refer to as the "strong" pattern. I have chosen

this term because this pattern does not involve the addition of an accretive element only before the root as with the weak pattern, as prenasalisation can also involve changes within verb root itself. The strong pattern also produces a wider range of surface realisations, which gives the impression of greater superficial irregularity.

The difference between basic and modified forms of the roots of strong verbs can be characterised underlyingly in the following ways:

- (i) the nasal *n* is added before any of those root-initial consonants which are amenable to prenasalisation, or between a root-initial vowel and a “nasalisable” consonant, and
- (ii) an accretive *a-* is added before the root.

This means that root modification in the case of strong verbs has a dual effect on the root, rather than the single effect that we find in the case of weak verbs, which involve only the addition of accretive initial *n-*.

I will first of all deal with the process of nasal accretion, since the pattern of weak verb alternations that I have already described also involves nasal accretion. As I stated above, *n* is added before the initial segment of a consonant-initial strong verb root. In the case of vowel-initial strong verb roots, however, this accretive segment is inserted within the root itself, between the first vowel and the following consonant. In the case of vowel-initial roots where the following syllable does not begin with a consonant, i.e. where there are two vowels in sequence, there is no place for the nasal to be inserted, so nasal accretion does not apply.

An accreted nasal is then assimilated in place of articulation to the following segment. Specifically, this means the *n* shifts to *m* before labial consonants, and to *ŋ* before velar consonants. Before alveolar consonants, the nasal remains unchanged. Although *m* and *ŋ* with such verbs never appear on the surface as *n*, these are assumed to be at least diachronically – and possibly also synchronically – derived from the same *n* that we find in other modified root forms.

The next stage in the derivation of the modified forms of strong verb roots involves a general process of consonant cluster modification. This involves the shifting of a fricative to a stop immediately after a homorganic nasal, which represents a general process applying when such sequences arise over morpheme boundaries (even though we are dealing with root modification rather than genuine morpheme boundaries in these cases). Thus, sequences of *mv* shift to *mp*, and sequences of *ŋy* shift to *ŋk*.

There is then a process of consonant cluster reduction, by which the following changes apply:

- (i) There is a dissimilatory loss of the initial nasal in sequences of *-ntn-*, giving *-tn-*.
- (ii) In sequences of three consonants, of which the final segment is *s* or *h*, the middle segment is lost. This rule is specifically involved in the following derivations: *ŋkh* → *ŋh*, *ŋks* → *ŋs*, *mph* → *mh*, *mps* → *ms*.⁵

The next stage in the derivation of the modified forms of strong verb roots is to add an accretive *a-* before the root. Of the five vowels, only the mid vowels *e-* and *o-* are found at the beginnings of strong verbs. The resulting underlying sequences of *ae-* and *ao-* are resolved as *a-*, by a general phonological rule which deletes mid vowels after the vowel *a*.

⁵ Interestingly, derivations such as *ŋks* → *ŋs*, rather than the other way around, would appear to run counter to what one might consider to be ordinary phonetic pressure. However, the underlying roots clearly call for segment deletion rather than insertion in accounting for morphophonemic alternations.

The result is the set of derivations involving a representative set of strong verb roots set out in Table 2, with the rightmost form representing the final output of the root modification rules.

Table 2: Strong verb modification patterns.

Basic root	Nasal accretion	Assimilation	Despirantisation	Cluster reduction	a-accretion	Vowel deletion
<i>mah</i> 'die'	—	—	—	—	<i>amah</i>	—
<i>owi</i> 'leave'	—	—	—	—	<i>aowi</i>	<i>awi</i>
<i>olki</i> 'hang'	—	—	—	—	<i>aolki</i>	<i>alki</i>
<i>omurep</i> 'live'	—	—	—	—	<i>aomurep</i>	<i>amurep</i>
<i>ehvo</i> 'white'	—	—	—	—	<i>aehvo</i>	<i>ahvo</i>
<i>elwo</i> 'vomit'	—	—	—	—	<i>aelwo</i>	<i>alwo</i>
<i>emlu</i> 'crazy'	—	—	—	—	<i>aemlu</i>	<i>amlu</i>
<i>eiti</i> 'tie'	—	—	—	—	<i>aeiti</i>	<i>aiti</i>
<i>pat</i> 'blocked'	<i>npat</i>	<i>mpat</i>	—	—	<i>ampat</i>	—
<i>vaŋ</i> 'eat'	<i>nvaŋ</i>	<i>mvaŋ</i>	<i>mpaŋ</i>	—	<i>ampaŋ</i>	—
<i>oruy</i> 'bathe'	<i>onrui</i>	—	—	—	<i>aonrui</i>	<i>anrui</i>
<i>oyep</i> 'fly'	<i>onyep</i>	<i>oŋyep</i>	<i>oŋkep</i>	—	<i>aonkep</i>	<i>aŋkep</i>
<i>okili</i> 'know'	<i>onkili</i>	<i>oŋkili</i>	—	—	<i>aonkili</i>	<i>aŋkili</i>
<i>ovoli</i> 'turn'	<i>onvoli</i>	<i>omvoli</i>	<i>ompoli</i>	—	<i>aompoli</i>	<i>ampoli</i>
<i>etehep</i> 'sit'	<i>entehep</i>	—	—	—	<i>aentehep</i>	<i>antehep</i>
<i>evyah</i> 'defecate'	<i>envyah</i>	<i>emvyah</i>	<i>empyah</i>	—	<i>aempyah</i>	<i>ampyah</i>
<i>etni</i> 'cook'	<i>entni</i>	—	—	<i>etni</i>	<i>aetni</i>	<i>atni</i>
<i>oyhi</i> 'see'	<i>onyhi</i>	<i>oŋyhi</i>	<i>oŋkhi</i>	<i>oŋhi</i>	<i>aonhi</i>	<i>aŋhi</i>
<i>evsor</i> 'wake up'	<i>envsor</i>	<i>emvsor</i>	<i>empsor</i>	<i>emsor</i>	<i>aemsor</i>	<i>amsor</i>

There is no semantic basis for predicting which verb roots beginning with mid vowels are going to behave like weak verbs and which are going to behave like strong verbs. Likewise, there is no formal basis for this distinction. There is, in fact, one minimal pair in my data in the form of the weak verb *owi* 'plant' (which has the corresponding modified root *nowi*) and the strong root *owi* 'leave' (which has the modified root *awi*). There is additionally a number of subminimally different pairs of weak and strong verb roots, such as those set out in Table 3.

Table 3: Subminimally different weak and strong verb root modification patterns

Weak verbs		Strong verbs	
<i>omonki/nomonki</i>	'drink'	<i>omol/amol</i>	'fall'
<i>orari/norari</i>	'flow'	<i>orantvi/anrantvi</i>	'cut off'
<i>ovovu/novovu</i>	'play'	<i>ovonji/amponji</i>	'give'
<i>ehmin/nehmin</i>	'husk coconut'	<i>ehpi/ahpi</i>	'count'
<i>etete/netete</i>	'sweep'	<i>ete/ante</i>	'stay'

Strong verbs differ from weak verbs not only in their patterns of root modification, as there are also significant differences in the way that the two classes of verbs behave with respect to the addition of inflectional prefixes. When prefixes ending in *u* are added to weak verbs beginning with *o*, the sequence is resolved according to the general morphophonemic rules of the language as *wo*. With weak verbs beginning with *e*, this vowel of the root assimilates to the backness of the prefix-final vowel, and the resulting sequence of *u* and *o* is also resolved as *wo*.

In the case of strong verbs, however, the initial *e* and *o* of the verb root is deleted, while the prefix-final *u* remains unchanged. Thus, the strong verbs behave exceptionally with respect to the application of the general morphophonemic rules of the language. Compare the behaviour of the forms of the strong verbs *owi* 'leave' and *ehpi* 'count' and the weak verbs *owi* 'plant' and *ehmin* 'husk coconut' with the prefixes \emptyset - 'SG.IMP' and *u*- 'PL.IMP' in Table 4.

Table 4: Weak and strong verb inflectional patterns.

	\emptyset - 'SG.IMP'	<i>u</i> - 'PL.IMP'
Weak verbs		
<i>owi</i> 'leave'	\emptyset - <i>owi</i>	<i>wowi</i> (< <i>u-owi</i>)
<i>ehmin</i> 'husk coconut'	\emptyset - <i>ehmin</i>	<i>wohmin</i> (< <i>u-ehmin</i>)
Strong verbs		
<i>owi</i> 'plant'	\emptyset - <i>owi</i>	<i>uwi</i> (< <i>u-owi</i>)
<i>ehpi</i> 'count'	\emptyset - <i>ehpi</i>	<i>uhpi</i> (< <i>u-ehpi</i>)

4 Inflectional marking

I have already indicated that there is a variety of prefixed inflectional categories in Erromangan. I do not propose to present the full paradigmatic sets for the various inflectional prefixes in this discussion as they exhibit a considerable amount of morphophonemic complexity. However, the prefixes mark a variety of subject pronominal categories, as well as a number of tense-aspect-mood categories. There is also a separate verbal prefix marking negation.

The expression of inflectional categories in Erromangan is morphotactically rather complex. The overall morphotactic structure of the verb could perhaps be represented as follows:⁶

$$\text{INFLECTION}_1 + (\text{NEGATION}) + (\text{INFLECTION}_2) + \text{ROOT}$$

All tense-aspect-mood categories in Erromangan are in fact marked discontinuously, involving combinations of the following formal markers:

⁶ In fact, there is a number of categories in addition to negation that can appear between Inflection₁ and Inflection₂, about which fuller details are provided in Crowley (1998:103-106).

- (i) an exponent of the first order prefixes, given above as Inflection₁
- (ii) a pre-root prefix, or the lack thereof, given above as Inflection₂
- (iii) the shape of the verb root itself, i.e. whether the verb appears in the basic or modified root form.

Some pairs of inflectional categories are distinguished exclusively by means of Inflection₁ prefixes, others exclusively by the presence or absence of the Inflection₂ prefix, and others exclusively by the shape of the root itself. Yet other pairs of categories are distinguished by a combination of more than one of these formal markers.

The major analytical difficulty with respect to Erromangan verb morphology is in establishing constant meanings for the various constituent parts of these discontinuous inflectional markers. Lynch and Capell (1983:24-25), for example, note a correlation between realis mode and the basic root form on the one hand, and irrealis mode and modified root forms on the other. Although there is a tendency for irrealis categories to involve root modification, it is in fact nothing more than a tendency. The categories of imperative and optative are semantically irrealis, yet they are marked by verbs in their basic root forms. In addition, the semantically realis categories of past habitual and present are marked by modified forms of the root.

Similarly, the Inflection₂ prefix, which for the sake of convenience at this point I will represent simply as *eme-*, sometimes expresses a distinction between continuous as against punctual aspect. However, in the conditional category, which also involves this prefix, there is clearly no continuous aspect involved.

With five distinct sets of Inflection₁ markers, a two-way distinction in the Inflection₂ slot (i.e. the presence or absence of *eme-*), and two different forms of the verb root, there are a total of twenty logically possible formal distinctions in the inflectional categories of affirmative verbs in the language. Of these, only thirteen combinations are actually utilised in the expression of inflectional contrasts in Erromangan (of which two express the same meaning). The various morphologically marked categories, along with the constituent parts of the discontinuous marking for each, are set out in Table 5.

Table 5: Inflectional categories on Erromangan verbs

Inflection ₁	Inflection ₂	Root Form	Morphological category
<i>yayo-</i> series ⁷	Ø-	Basic	Recent past
		Modified	–
<i>yam-</i> series	<i>eme-</i>	Basic	Past continuous
		Modified	Present
	Ø-	Basic	Distant past
		Modified	Past habitual
<i>yapi-</i> series	<i>eme-</i>	Basic	Dependent past
		Modified	Past habitual ⁸
	Ø-	Basic	Optative
		Modified	–
<i>yoyo-</i> series	<i>eme-</i>	Basic	–
		Modified	Conditional
	Ø-	Basic	–
		Modified	Future
<i>yakin-</i> series	<i>eme-</i>	Basic	–
		Modified	–
	Ø-	Basic	Counter assertive
		Modified	– ⁹
	<i>eme-</i>	Basic	–
		Modified	–

The dashes in this table indicate those particular conjunctions of morphological categories which do not occur in the language.

⁷ Each of these paradigms is represented by the first person singular exponent in this table. I do not propose to present the full paradigms for each of these sets of inflectional markers in this paper. Crowley (1998:85-114) provides full details.

⁸ Note that past habitual can be expressed either with or without the Inflection₂ marker, i.e. there is no semantic contrast associated with the presence or absence of the *eme-* marker in this category.

⁹ There is historical evidence that there may have been a category that was marked by the *yakin-* series of subject markers with an associated modified, rather than basic, root form. The conditional subordinator *naŋku* 'if' would be the regular third person singular form of the verb *oyu* 'say' in such a paradigm, and this verb is used in subordinate constructions in a variety of ways that do not directly reflect its quotative lexical meaning. Synchronically, however, there is no complete paradigm of this type.

5 A historical explanation for the mess in Erromangan?

In world terms, the inflectional morphology that I have described here for Erromangan is not particularly complicated. This language is, after all, not as complex as Navajo or Inuit. However, having come to Erromangan from previous work on Northern and Central Vanuatu languages, it is certainly a messy system by comparison. One of the distinguishing typological features of the languages of Southern Vanuatu is their relatively complex verbal morphologies, and Erromangan is similar in its level of morphological complexity to the languages of Tanna and Aneityum.

It is probably not so unusual that Erromangan marks inflectional categories discontinuously, by means of root modification and prefixes. Many of the Central Vanuatu languages, of course, do exactly the same. However, Erromangan does add another level of complexity in that its verbal inflections are marked by tripartite forms, rather than just by forms consisting of two parts.

The patterns of verb root modification themselves are also formally rather more diverse than we find in most of the languages of Central Vanuatu. Admittedly, there is a common theme involving the addition of an accretive nasal element, which is also something that is common in the languages of North Central Vanuatu. But this accretive segment is added before some roots (which seems perfectly natural, assuming that it began as an affix of some kind), while it is placed *inside* others (which seems somewhat less natural, given the preference in languages for uninterrupted constituents).

Moreover, the process of root modification for what I have called strong verbs itself has two separate phonological effects, i.e. the addition of this accretive nasal *and* the addition of an accretive *a* before the root (which then interacts with underlying root-initial vowel). The addition of this vowel, and the addition of a nasal share nothing in common as phonological processes, so we can hardly treat this as some kind of single prosodic process (as would be possible, for example, if root modification involved a combination of nasal accretion and subsequent nasalisation of other parts of the root, or if it involved the addition of an accretive *a*, and subsequent lowering of other vowels in the root). What this language has done is to latch on to two seemingly unrelated formal processes to do a single job.

Of course, this is not the end of the messiness in Erromangan verbal morphology. There appears to be little rhyme or reason for the fact that certain combinations of morphological forms are possible as expressions of inflectional categories, while others appear to be impossible.

The idea that languages exhibit an overriding tendency to develop towards symmetry is perhaps oversimplistic. Thurston (1987) distinguishes between exoterogeny and esoterogeny in language change. Exoterogeny is the sum of those processes that result in an originally complex language being more easily learned by outsiders who use it in contact situations. Esoterogeny, on the other hand, refers to the kinds of processes that are undergone by a language that is seldom used except as an in-group language.

On Erromango in the 19th century, there were originally four or five distinct languages. During the latter part of the century, these gave way to the single Erromangan language that is spoken today (Crowley 1997). This linguistic redistribution took place as a result of massive depopulation caused by disease and famine, as well as resettlement at the behest of the Christian missionaries. These kinds of circumstances would have almost certainly resulted in considerable contact between speakers of the various original languages. For one of these languages to have won out over the others presumably means that it had been used

exoterically, so modern Erromangan could perhaps be expected to exhibit exoteric simplification.

If this has happened, then Proto Southern Vanuatu should have been considerably more complex in its morphology than Erromangan is now. However, comparing Erromangan to the other languages of Southern Vanuatu, there is no real evidence for more structural complexity than we find at present.

Synchronic messes obviously have to have some kind of diachronic explanation. Before I begin to look at the question of the prothetic nasal element, I will briefly examine the behaviour of verb-initial *o-* and *e-*. It will be remembered that with weak verbs, these initial segments behave fully like an inherent part of the root. In the case of strong verbs, however, these initial segments are somewhat less strongly “attached” to the root, in that they are deleted following certain prefix-final segments.

Lynch (1992) discusses the behaviour of verb-initial vowels in the languages of Southern Vanuatu generally, noting that there appears to have been a general process of initial vowel accretion. He was unable to provide a full explanation of what has happened, or why, and I am certainly in no position to attempt to take this discussion any further.

One thing that is clear, however, is that the different languages of the Southern Vanuatu subgroup appear to have incorporated these accretive vowels to differing extents as part of the root itself. In the Tannese languages, these historically accreted vowels are invariably treated as part of the verb root, and there is no context in which this vowel is separable from the root. In Anejoñ, there is a highly restricted range of morphological contexts – in the derivational, but not the inflectional, morphology – in which the accreted vowels may be separated. Finally, in Erromangan, the accreted vowels are systematically lost in a fairly wide range of inflectional contexts. Thus, Erromangan has incorporated these vowels as part of the root to the least extent of all of the Southern Vanuatu languages.

I am not sure yet how this fact is involved in the behaviour of root modification patterns, or even if it is involved at all. However, the odd behaviour of initial *a-* in the root modification process suggests that this component of the root modification process perhaps has as its origin the same source as this accretive segment. The problem, of course, is in explaining why the accretion should apply only in modified root environments with *a-*, and in basic root environments with accretive *e-* and *o-*. The fact that *a-* replaces *e-/o-* when they come into contact in modified root environments may be of some significance, though I am not yet sure what this might be. It must also be remembered that when *a-* is accreted to a root beginning with *e-* or *o-*, that vowel is itself often historically accreted, so arguing that the addition of *a-* is part of the same process is suggesting a double accretion. I find this argument less than persuasive.

One possible explanation for this phenomenon¹⁰ is that *a-* presumably had some specific function in Proto Southern Vanuatu (although that function is probably unrecoverable now). Subsequently, some instances of this *a-* shifted to either *e-* or *o-*, possibly determined by the nature of the following consonant and vowel (but with the conditioning factors not yet established). If the resultant *e-* or *o-* then came to be reanalysed as more integrally part of the verb root rather than some kind of a bound morpheme, those instances of still unshifted *a-* may have been reanalysed as some kind of general verb “marker”. This might then explain how “unverby-looking” *e-* or *o-* initial roots may have attracted an additional *a-*, as this would have made these forms look like proper verbs again. The weakness with this argument, of course, is the fact that *i-* and *u-* initial roots were not similarly affected.

¹⁰ For which I owe thanks to a suggestion from John Lynch.

Another major issue that needs to be resolved is the source of the accretive nasal that is added in modified root environments. The fact that root modification involves an element of prenasalisation is surely too similar to what happens in many of the languages of Central Vanuatu (and which can be reconstructed with some antiquity in these languages) to be due to chance. At the same time, the nasal grade increment in the languages of Central Vanuatu is typically associated with the expression of realis categories, whereas in Erromangan, it is more frequently associated with irrealis categories. The association between root modification and irrealis categories in Erromangan may perhaps be a natural development out of the Central Vanuatu in which it is typically realis roots that are morphologically marked. In universal terms, of course, we would expect realis to be the least marked category, which is precisely what we do find in Erromangan.

If there were to be some kind of special connection between Erromangan and the Central Vanuatu languages, this would not be the only point of similarity. Alone in the languages of Southern Vanuatu, the Erromangan languages have object suffixes on verbs, which is also a widespread feature of Central Vanuatu languages. Erromangan also has a preposed first person possessive marker *nan̄ku*, which is used alongside the directly inherited postposed possessive forms *horuŋ* and *enyau*. The form *nan̄ku* looks suspiciously like possessive forms in some of the languages to the north. Lynch (in this volume) also points to a number of other unique similarities between Erromangan and the languages of Central Vanuatu, including a few possible irregular lexical developments from Proto Oceanic.

However, the genetic distance between Southern Vanuatu and Central Vanuatu is quite great. Moreover, as Lynch (1975) shows, superficially similar sorts of root modification patterns involving prenasalisation in the verbal systems of genetically quite distant languages can arise independently from quite different sources, as Yabêm and Buang in Papua New Guinea have also acquired such patterns. In fact, prenasalisation seems to be one of the recurring preferences for languages in which root modification patterns have evolved. Note, for example, the existence of nasal mutation in the nominal morphology of the historically quite unrelated Celtic languages.

What makes the question more interesting in the case of Erromangan is whether or not it is purely geographically accidental that Erromangan is the only Southern Vanuatu language that is spoken adjacent to languages belonging to the North Central Vanuatu subgroup. That is, could the development of nasal accretion have been the result of diffusion?

Linguists often speak of some linguistic features as being relatively easily diffusable, while others appear to be relatively immune to borrowing. Of course, there are all sorts of problems with any kinds of generalisations on this topic, but my gut feeling is that root modification patterns **should** be relatively – perhaps even extremely – hard to borrow, without at least borrowing a whole lot of other verb morphology, and probably also a lot of vocabulary. However, apart from this pattern of root modification, the verb morphology and the lexicon of Erromangan both look, for the most part, **very** different to anything we find in North Central Vanuatu. This seems hardly the stuff on which to base a hypothesis of major structural diffusion. However, if diffusion is involved, then Erromangan has at least done the universally preferred thing in associating the modified root forms with the marked irrealis types of categories.

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9 *'Adjectives' in Tamambo, Malo: syntactic variation, semantic and discourse correlation*

DOROTHY JAUNCEY

1 Introduction

Studies of the syntax of Oceanic languages have been heavily weighted towards topics which emphasise differences in those languages from others, such as possessive constructions, transitive marking and verb serialisation. A specific interest in lexical categories has recently been confined to a noun-verb distinction and the various expressions of locational concepts. Adjectives have not received much attention. But historically, in linguistic studies, there has been a long pattern of interest in lexical categories and now a burgeoning interest in their use in actual discourse. It is these two areas of lexical categorisation and discourse use that form the basis from which I look at adjectival concepts in Tamambo, the language of western Malo island, Northern Vanuatu.¹

The aims of this paper are, specifically,

- (1) to outline how adjectival concepts² are lexically categorised in Tamambo
- (2) to describe a three-way syntactic choice available to Tamambo speakers to convey such concepts, with emphasis on an unusual variation, using the preposition *hina*.

More generally, the paper aims

- (3) to show how morphosyntactic behaviour and discourse functions are correlated with semantic types.

¹ This is a revised paper of one of the same name given at SICOL, Fji, in July 1995. I am grateful to those conference participants who made suggestions about the paper and particularly, in Australia, to Cynthia Allen and Malcolm Ross.

² Adjectival concepts here are taken to be those which denote particular qualities or attributes. The discussion is limited to the expression of such concepts in words which Bloomfield (1933:202) called 'descriptive adjectives'.

To do this, the paper is set out as follows: §2 looks at where adjectival words in Tamambo slot between, or overlap, noun and verb parameters, based on morphological and syntactic criteria; §3 discusses the grammatical choices available to speakers in using adjectival words, looking especially at prepositional phrases with *hina*. Next, §4 explores the 'semantic types' of adjectival words and then §5 presents the correlation between grammatical variation, semantic types and discourse functions. Finally, §6 makes some concluding remarks about the implications for lexical categorisation with reference to previous studies on adjectives.

The data in this paper were collected in six months of fieldwork over 1994–95 at Avunatari, West Malo, and with speakers of Tamambo in Australia from 1993–95. The language has approximately 2,000 speakers and belongs to the North-Central Vanuatu group, West Santo subgroup, South Santo chain (following Tryon 1976; Clark 1985).

2 Morphological and syntactic criteria for classification into lexical categories

Interest in and studies on lexical categories have been around probably as long as there have been grammarians. It is some considerable time since Jespersen pointed out the subtleties of the distinction between noun and adjective (1924:72–81), and with regards to the category 'adjective' in particular, it is 30 years since Dwight Bolinger (1967) discussed the differences between predicative and attributive adjectives in English. He talked about the semantic features of some adjectives, rather sooner than it was fashionable to do so, and postulated prior predication and establishment in discourse as the means by which a speaker of English can transfer a modifier to an attributive position. Ten years later, Dixon's famous paper (1977) proposed that lexical items fall into 'semantic types' and that universal adjective types emerge based on semantic, syntactic and morphological criteria.

Eleven years further on, Sandra Thompson (1988:260) used Dixon's seven adjective 'types' as the basis for arguing that "a satisfying account of the lexical categorisation of Property Concepts in the world's languages can only be stated in terms of the use of Property Concepts in actual discourse". She claims that "Property Concept words tend to share features with nouns and verbs cross-linguistically..." and rejects "a semantic explanation for this fact". In light of the data presented in this paper, I will return in §6 to these proposals of Thompson's regarding the categorisation of Property Concepts and their use in discourse to explain their functions.

As Givón (1984:13) has commented, "the class of adjectives is a notorious swing category in languages". Languages in which "adjectival meanings are discussed primarily by nouns..." are called by Schachter (1985:17) "adjectival-noun languages" and languages in which "adjectival meanings are expressed primarily by verbs are...called adjectival-verb languages". How some languages, especially some Oceanic languages, have been classified by various researchers with regard to this parameter is shown below.

Table 1: Classification of adjectival concepts in some Oceanic languages³

ADJECTIVES	as NOUNS	as SEPARATE CLASS	as VERBS
classified in Oceanic languages, as per grammars cited	Samoan (Mosel & Hovdhaugen 1992)	Boumaa Fijian (Dixon 1988) Lenakel (Lynch 1978) Big Nambas (Fox 1979) Paamese (Crowley 1982) Manam (Lichtenberk 1983)	Saliba (Mosel 1994)

If Tamambo had to be slotted into an 'adjectival-noun language' or an 'adjectival-verb language', then the discourse preference of speakers would initially suggest that it is an adjectival-verb language. Adjectival concepts expressed as verbal predicates are plentiful and, in function, mostly behave as do intransitive verbs. But, unlike verbs, these adjectival words are also used as attributes of nouns, and some even take on the same functions as nouns, so such words appear to be somewhere on a continuum between nouns and verbs, with some much closer to the noun end of the continuum and some closer to the verb end. For convenience, words expressing adjectival concepts in Tamambo and that fulfil the following criteria are henceforth called 'adjectives'. However, it should be stressed that some could equally be classified as a particular subset of nouns and some as a particular subset of verbs. All can function as:

- (1) predicate of a clause
- (2) modifier to a noun

In addition, some can also function as a

- (3) prepositional object of preposition *hina*

thus reflecting some of the functional capacities of words categorised as verbs and words categorised as nouns in this language.

However, adjectives are not so versatile as to be able to carry out *all* the functions of either verbs or nouns, or be specified for all the same categories. Unlike nouns, they cannot be the core arguments of a verbal clause and they cannot be marked for definiteness or as the object of a transitive verb. But surprisingly, a limited number can be categorised for plurality and can be linked in a direct possessive construction, and it further appears that some can function as the predicate of a non-verbal clause (see §4.2). The following table shows the main functions of nouns, verbs and 'adjectives' and the categories for which they can be specified in Tamambo.

³ For some dozens of examples in other languages of the world, see Thompson (1988:248-250).

Table 2: Functions and category specifications of noun, adjective, verb in Tamambo

FUNCTIONS	NOUN	ADJECTIVE	VERB
core argument of a verbal clause	yes	no	no
subject of a non-verbal clause	yes	not attested in data	no
predicate of a non-verbal clause	yes	some	no
object of a preposition	yes	some	no
modifier to noun	some ⁴	yes	some
modifier to verb	no	some	no ⁵
predicate of a clause (intransitive verb-type)	no	yes	yes
predicate of an transitive verbal clause	no	no	yes
CATEGORIES able to be specified	NOUN	ADJECTIVE	VERB
definiteness	yes	no	no
quantifiability	yes	no	no
ability to enter into possessive constructions	yes	some	no
plurality ⁶	some	some	no
intensifiability	no	most	yes
degree periphrastically marked	no	most	some
tense, aspect, mood	no	some	yes

3 Syntactic frames for adjectival words

3.1 Verbal predicates and attributes of nouns

Looking first at the possible functions of adjectival words, we see from Table 2 that all such words in the same form, without any morphological modification, can be the predicate of a clause, in the same structure as an intransitive verbal clause, and also be modifiers of nouns. Thus there are straightforward examples such as the following:

Adjectival predicate

- (1) *O soari! Heletu mo jala!*
 2SG look pig 3SG wild
 'Look! The pig's wild!' ⁷

⁴ Subsets of location nouns and numerals

⁵ This excludes words classed as phrasal adverbs, or verbs functioning in a serial verb construction.

⁶ This refers to plurality as shown morphologically on the word, rather than to number cross-referencing, as is shown by an obligatory subject pronoun in a verb phrase.

⁷ In the orthography used here, *h* = velar fricative /x/. All examples of *ng* = velar nasal /ŋ/. Voiced stops have a prenasalised articulation. Abbreviations used are as follows:

Attribute of a noun (in a non-verbal clause)

- (2) *O soari! Nia heletu jala!*
 2SG look IP:3SG pig wild
 'Look! It's a wild pig!'

Attribute of a noun (in a verbal clause)

- (3) *O soari na heletu jala!*
 2SG look ART pig wild
 'Look at the wild pig!'

For adjectives in the same form to be both attributes and verbal predicates such as shown above is common in many languages. But this language is unusual in that it has another type of syntactic construction to express adjectival concepts, and that is with preposition *hina*.

3.2 The *hina* construction**3.2.1 Background on *hina***

The word *hina* is analysed as a preposition in this language. Although now a whole word morphologically and phonologically, it is clearly separable diachronically into *hi* marking instrumental, reflecting "POc **kini* 'by, with (instrument)'" (Pawley 1973:142) and POc common article **na*. There is also a Tamambo preposition *hini* as in *hini Air Vanuatu* 'by Air Vanuatu', separable in the same way into *hi* instrumental and *ni* denoting belonging to proper name/kin, reflecting "POc **ni* 'attributive or possessive relation'" also posited by Pawley.⁸

Like any well-behaved preposition, *hina* usually precedes common nouns in prepositional phrases (henceforth PPs). It has a wide range of semantic roles in those constructions, which are illustrated below:

Instrumental

- (4) *...tabaluhi-na mo turu horo-a hina vuhai...*
 wife-P:3SG 3SG stand block-O:3SG PREP stick
 '...his wife blocked him with the stick...'

1, 2, 3	first, second, third person
ART	article
CLFR	classifier
DIS	discourse marker
E	exclusive
FUT	future
I	inclusive
INDEF	indefinite article
INTENS	intensifier
IP	independent pronoun
IRR	irrealis
LINK	possessive linker

NEG	negative particle
NOM	nominalising affix
O	object pronoun
P	possessive pronominal
PL	plural
PREP	preposition
RED	reduplicated
REF	prior reference made
REP	repeating action
SG	singular
TA	tense-aspect marker

⁸ Note however, that Tamambo differs from many other Oceanic languages in that, in possessive constructions, *-ni* denotes a proper name/kin possessor, and *-i* denotes a common noun possessor.

Causer (non-animate)

- (5) *Aka mo dono hina lulungi tawera.*
 boat 3SG sink PREP wave big
 'The boat sank with the big wave./The boat was sunk by the big wave.'

Partitive

- (6) *Voi mo sile-au hina tua-i ti.*
 mum 3SG give-O:1SG PREP some-LINK tea
 'Mum gave me some tea.'

Theme

- (7) *O tinerani hina lulungi watitina.*
 2SG watch.out PREP wave PL.big
 'Look out for the big waves!'

Locutional topic

- (8) *Mo tere a-ta sora hina uraji mwede.*
 3SG leave.off 3SG.IRR-REP talk PREP child particular.one
 'He left off ever talking again about that particular child.'

Source or cause of emotion/reaction

- (9) *Mo-le mangisi hina na-natu-na.*
 3SG-TA happy PREP PL-child-P:3SG
 'He is proud of his children.'

Goal/object of attitude

- (10) *Tovona ro na-te ololo hina subwe.*
 now thus 3PL-NEG have.respect PREP chief/s.
 'So nowadays they have no respect for the chiefs.'

3.2.2 Different functions of *hina*

But where *hina* precedes an adjective in a PP, the construction has three unusual functions:

- (1) as a predicate in a non-verbal clause
- (2) as a 'subsidiary predicate' (term used by Andrews 1985:67)
- (3) as part of a noun phrase (henceforth NP) in a verbal clause.

It should be noted that other prepositions in Tamambo do not behave similarly, and function in more limited syntactic frames.

Clausal predicate

- (11) *...ku baranga, karu-ku hina waririhi,*
 1SG thin leg-P:1SG PREP PL.little

nia mo-te boi vavine sohena.

IP:3SG 3SG-NEG want woman the.same

'...I was skinny, my legs were little, he didn't want a girl like that.'

Subsidiary predicate – where the attributive PP applies to the object of the verbal clause

- (12) *Mo hani-a hina baro.*

3SG eat-O:3SG PREP raw

'He ate it raw.'

- (13) *...ka biri-a mo iso ka wadi-a hina waririhi.*

1PL grate-O:3SG 3SG finish 1PL roll-O:3SG PREP PL:little

'...we grate it and then we roll them⁹ really small.'

Part of an NP within a verbal clause

In this kind of construction, the prepositional *hina* phrase modifies a noun, and becomes part of an NP argument within a verbal clause.

- (14) *...tadono mo dingi-ra, mo lai mwede hina vorivori...*

devil 3SG chase-O:3PL 3SG take particular.one PREP little

'...the devil chased them and caught that little one/ the particular one that was little...' ¹⁰

- (15) *Ro stori hina busohi manihile iso ro.*

thus story PREP short only TA finish thus

'So the story that's just a short one finishes like that.'

It could be argued that the 'adjectives' here in these *hina* constructions represent conceptual nouns rather than adjectives; i.e. that in (13), *waririhi* 'little-Plural' should be interpreted as 'smallness' and in (15), that *busohi* 'short' should be regarded as 'shortness' and so on. Whilst it is entirely possible that this may have been the meaning when such constructions developed long ago, at this stage in the evolution of the language, they are rejected by Tamambo speakers as having other than an adjectival meaning, e.g. "*hina busohi* means 'short'". Additionally, *hina* is attested with adjective *duhu* 'good' (see example (73)) but is not acceptable in the same sort of construction with *vaiduhua* 'goodness'. Given that conceptual nouns *do* exist in Tamambo, (e.g. 'goodness' and others derived in a highly productive nominalisation process, see §4.6) and that the *hina* constructions synchronically can occur with a variety of both noun-like and verb-like adjectival words, I thus analyse such words in the *hina* constructions as 'adjectives'.

So it can be seen that there is a wide grammatical choice for speakers to express adjectival concepts in this language. Adjectives can function as a predicate, as an attribute of the noun (in either verbal or non-verbal clauses) and with *hina*, as an attribute of the noun or as a clausal or subsidiary predicate. But not all grammatical choices are appropriate with all

⁹ This is in reference to a kind of small laplap (island pudding), like a spring roll, being made. So although the object pronoun of the verb 'roll' is singular, the adjective plural of 'little' is used to indicate that quite a few rolls are produced.

¹⁰ Note that relative clauses in Tamambo are formed differently from this *hina* structure, although one possible English translation here can be in the form of an English relative clause.

descriptive adjectives. Just which of the syntactic frames is chosen for which adjective and when, depends to a considerable degree on the semantics of the type of adjective. This is discussed in the next section.

4 Adjectives in semantic groupings

4.1 Semantic types

Groups of adjectives are differentiated on the basis of morphosyntactic behaviour, as outlined in §4.2 to §4.7. On the basis of these differences, they fall fairly readily into the semantic 'types' proposed by Dixon (1977) as follows, with some variation:

- (1) Dimension
- (2) Physical Property
- (3) Colour
- (4) Age
- (5) Human Propensity
- (6) Value

These equate to six of the seven semantic types discussed by Dixon. The seventh type proposed by Dixon is that of 'Speed'. All examples of the 'Speed' type in Tamambo are handled by verbal modifiers, and cannot modify nouns or be verbal predicates in their own right. Human age is shown by specific nouns (see §4.5). Many words which describe some sort of 'Physical property' are classed only as intransitive verbs (see §4.3.) and cannot modify nouns.

The characteristics of each of the semantic types is discussed in turn, but textual examples are only given in this section where a particular semantic type shows some idiosyncratic morphosyntactic behaviour. Examples of how the semantic types are used within the grammatical variations of adjectival expression are given fully in §5.

4.2 Dimension

This is a small closed set of four adjectives only. They are the most noun-like of the Tamambo adjectives and differ morphologically from other semantic types in that they are the only ones to show plurality, two by suppletion, two by reduplication.

	Singular	Plural
'big'	<i>tawera</i>	<i>watitina</i>
'little'	<i>vorivori</i>	<i>waririhi</i>
'tall/long'	<i>baravu</i>	<i>ba-baravu</i>
'short'	<i>busohi</i>	<i>bu-busohi</i>

They are also unusual in that they can be used in a direct possessive construction to give an idea of comparison. In the first two examples, the adjective is linked to the common noun possessor by possessive linker *-i*.

- (16) *Vila nia tawera-i batui-vanua Vanuatu.*
 Vila IP:3SG big-LINK village Vanuatu¹¹
 'Vila is the biggest town in Vanuatu.'

- (17) *Nia baravu-i vorae.*
 IP:3SG tall-LINK sibling
 'He is the tallest of the brothers.'

As well as the *-i* possessive linker, a pronominal possessive suffix can also be used in a direct possessive construction to indicate degree.

- (18) *Nia baravu-ra*
 IP:3SG tall-P:3PL
 'He is the tallest of them. (lit. he is their tall)'
- (19) *Iau vorivori-da.*
 IP:1SG little-P:1PL.I
 'I'm the littlest of us.'

Dimension adjectives can also modify verbs with no linking suffix:

- (20) *Mo hao mo sahe, mo sahe vorivori...*
 3SG climb 3SG go.up 3SG go.up little
 'He climbed up, he went up a bit...'
- (21) *...niho o-bo ovi busohi manihi ana verama.*
 IP:2SG 2SG-FUT live short only PREP world
 '...you will live only a short time in the world.'

Aspect marker *le*, which usually has an imperfective use, can be used with Dimension adjectives. In the next example, it is used inchoatively:

- (22) *Moli mo-le tawera.*
 Moli 3SG-TA big
 'Moli is getting big.'

Adjectives of this type have the widest ranging characteristics of all of the types listed. Semantically, an adjective of Dimension denotes a stable kind of feature. Things which are big or small or long or short usually stay that way, at least for a reasonable time. Size is not usually thought of as a quickly-changing feature of most entities. And entities with the "highest time stability, those which do not change their identity over time or (change it rather slowly)...are those (which) tend-universally- to lexicalise as nouns" (Givón 1984:14).

This time stability of Dimension adjectives is probably the reason why they can take on such noun-like characteristics. Although they do share some verb-like characteristics, and can certainly be used as predicates in different kinds of clauses, they can be specified for more noun-like categories than any other adjective type, suggesting that these adjectives have something of the more permanent nature of what is embodied by nouns, such as to "identify a...certain kind of thing" (Wierzbicka 1988:470).

¹¹ The possessive phrase *batu-i vanua*, lit. 'head LINK house' is now lexicalised to mean 'village/town'.

Dimension adjectives occur much more often than other types as attributes in Tamambo, either directly modifying the noun or with *hina*, and their morphosyntactic functions reflect the relatively unchanging, visible nature of the feature that each of them represents.

4.3 Physical Property

Words denoting some concept of 'Physical Property' make up a very large group semantically. However, many of them function only as intransitive verbs¹² and are not regarded as overlapping, or also belonging to, the adjective class, in that they do not fulfil the syntactic distribution set up for adjectives in §2. For example, many such words which express a physical property, such as 'thirsty', 'hungry', 'full' (stomach), operate only as intransitive verbs. Presumably this is because, as Croft says, a "description must characterise some property that is stable and salient enough to merit an attributive adjective" (1991:106), and such concepts presumably are seen as not doing so. Nevertheless, some concepts which would also seem to be fairly transitory, such as 'hot', 'cold', can be used attributively and the reasons for this are suggested in §5.3.

Semantically, the group includes antonyms such as 'hot, cold' mentioned above; 'soft, hard'; 'light, heavy'; 'fat, thin'. The word for 'different' *tinabu* is also included with this group. Many of the adjectives of this class are derived from verbs, or occasionally nouns, through reduplication, such as

<i>siala</i> 'slip'	→	<i>sia-siala</i> 'slippery'
<i>tunu</i> 'cook on top of fire'	→	<i>tu-tunu</i> 'hot'
<i>sale</i> 'float'	→	<i>sale-sale</i> 'light (in weight)'
<i>bwero</i> 'ear'	→	<i>bwero-bwero</i> 'deaf'

Others show reduplication patterns but no obvious simple forms:

<i>rovorovo</i>	'dry (after no rain)'
<i>melomelo</i>	'colourless'
<i>ngadingadira</i>	'rough'

If they are not already in a reduplicated form, they can often, but not always, be intensified through reduplication, as with

<i>baru</i> 'fat'	<i>barubaru</i> 'very fat'
-------------------	----------------------------

Otherwise they can be intensified by *asena* 'very', or *tina* 'really' when used either as a predicate or as an attribute.

- (23) *Tamalohi mo baru asena.*
 person 3SG fat INTENS
 'The man's very fat.'
- (24) *Nia tamalohi baru tina.*
 IP:3SG person fat INTENS
 'He's a really fat man.'

¹² Many are words denoting some kind of change in physical state, deriving from verbs and morphologically marked by prefix *ma-*, probably reflecting POC verb-deriving stative prefix **ma-* (Ross 1988:143), e.g. *dare* tear → *mandare* torn; *bila* shatter → *mambila* shattered.

Degree can be marked periphrastically for some adjectives which lend themselves semantically to comparison such as *suiha* 'strong', *dira* 'hard' as in:

- (25) *Heletu nian mo suiha mo liu-ra.*
 pig this 3SG strong 3SG exceed-O:3PL
 'This pig is the strongest of them. (lit. this pig is strong he exceeds them)'
- (26) *Vuhai nian mo dira mo liu.*
 tree this 3SG hard 3SG exceed
 'This wood is the stronger/strongest.'

Morphologically, adjectives of this type show no variation for plurality, nor the other more noun-like characteristics of the Dimension type. Some Physical Property adjectives are able to be used with TA *le* to denote 'still'/'continuing' as in, for example, asking after someone's health:

- (27) *Le rongo mo duhu? Le suiha?*
 TA feel 3SG good TA strong
 'Is he feeling alright? Still strong?'

4.4 Colour

Colour adjectives show many morphosyntactic similarities to adjectives of Age and Physical property, as shown in Table 3.

It is ungrammatical to specify them for intensity. Either an entity is red (or green or black), or it is otherwise. It cannot be 'very red' or 'very black' in Tamambo. Nor can such adjectives be specified for degree to become, say, the 'reddest' or the 'whitest'. Like Age adjectives, they vary from other adjective types in that they are not marked for tense, aspect or modality.

The Colour adjectives make up a small set of five words with most derived from nouns by the addition of *-ha*, denoting 'like':

- dae-ha* 'blood-like = red'
jori-ha 'yellow fever-like = yellow'
heja-ha 'fish of blue-green colour-like = blue/green'
vuriha 'black/dirty'¹³

This process was mentioned by Codrington (1885:273) for some other neighbouring languages of Vanuatu as *-ga*, a "termination...added to Substantives or other words to make Adjectives". This suffixation of *-ha* to nouns is a fully productive process and derives intransitive verbs which are noun-like. Thus the colour terms make up a small closed set with some different morphosyntactic behaviour amongst a large open class of intransitive verbs. Note that most other such derivations with *-ha* can only be used predicatively, as in the following:

- ivao* 'crowd' → *mo ivao-ha* 'it's crowded'
tamalohi 'person' → *mo tamalohi-ha* 'it's inhabited'

¹³ In this word, *-ha* is not synchronically separable.

'White' *lulu* is also the name of a large white bird, and is added here on semantic grounds.

Other colours such as 'grey', are indicated by an intransitive verb such as in *mo bara* 'he's grey-haired'.

4.5 Age

There are only two members of this closed type, antonyms *haramba* 'new' and *tuai* 'of old/of a long time'. Both can be used in all three syntactic frames outlined for 'adjectives' in §2.

Human age is indicated by specific nouns such as:

uraji 'child'

uraji vorivori 'baby (lit. little child)'

vavine vorivori 'young girl (lit. little female)'

mwera vorivori 'young boy (lit. little male)'

uluvou 'young man, youth'

maevo 'adolescent girl (approx 12–18 years)'

To describe a young animal, or even a young tree, once again Dimension adjective *vorivori* 'little' is used, as in:

heletu vorivori 'young/little pig'

vuhai vorivori 'young/little tree'

Thus adjectives of age are almost always used for non-animate referents, such as baskets, trucks or boats. Similarly to Colour adjectives, it is ungrammatical to mark them for intensity or degree to become, say, 'very old' or 'older'.

Where a colour adjective and an age adjective combine as attributes, the preference is for the colour adjective to come immediately next to the noun it modifies, preceding the age adjective, as in (28).¹⁴ Where the adjectives are expressed as verbal predicates, the colour adjective will still precede the age adjective, as in (29).

- (28) *O tau-a ana hete daiha tuai!*
 2SG put.in.place.-O:3SG PREP basket red old
 'Put it in the old red basket!'

- (29) *Mo-le ovi ana vanua tawera, mo lulu, mo haraba.*
 3SG-TA live PREP house big 3SG white 3SG new
 'She lives in a big, new white house. (lit. She lives in a big house, it's white it's new.)'

Adjective types Colour and Age show the least ability to take on any additional trappings of nouniness or verbiness in their morphosyntactic behaviour. Perhaps it could be suggested that they of all, are the most 'adjectival', doing what adjectives do best, adding a

¹⁴ However, note that this is an elicited example, and whilst acceptable, the preference of speakers is to use no more than one descriptive adjective per noun as in (29).

feature,¹⁵ but not adding additional semantic information such as intensity or plurality through being specified for additional grammatical categories.

4.6 Human Propensity

The adjectives of this type are the only group which cannot function with the *hina* construction.¹⁶ Nevertheless they make up an open set whose members can operate as predicates or as attributes as part of an NP in a verbal or non-verbal clause. It is ungrammatical to specify them for degree but they can be intensified as in:

- (30) *Nia mwera batudira tina.*
 IP:3SG boy naughty INTENS
 'He's a really naughty boy.'

They are occasionally marked for tense or aspect as in

- (31) *Are na lahi, ka-isoduhu ka-bo mangisi.*
 if 3PL marry 1PL-all 1PL-FUT happy
 'If they get married, we'll all be happy.'

They differ from other adjectives in that they can be nominalised by a derivational process suffixing with a vowel (usually *-a*, but phonologically conditioned.) For example:

<i>lokoloko</i> 'lazy'	→	<i>lokoloko-a</i> 'laziness'
<i>mangisi</i> 'happy'	→	<i>mangisi-a</i> 'happiness'
<i>majine</i> 'kind'	→	<i>majine-a</i> 'kindness'
<i>matasuri</i> 'jealous'	→	<i>matasuri-a</i> 'jealousy'
<i>manamana</i> 'friendly'	→	<i>manamana-e</i> 'friendliness'

But not all words indicating concepts of human propensity are grammatically acceptable as attributes. Some, including 'be surprised at', 'be sad about', function only as transitive verbs; and intransitive verb 'be angry' can be transitivised to make 'be angry at'.

Adjectives of Human Propensity have more grammatical verb-like characteristics than most other types in Tamambo. They share with verbs an ability to nominalise and an inability to use *hina*. In addition, they show that they can have tense and aspect marking and be intensified, suggesting that these types have some feature about them which could be described in Wierzbicka terms (1988:486) as "signalled by a verb...normally seen as transient, as a temporary state of affairs, characterising a particular state of time as much as a particular entity".

Such adjectives, which denote features that cannot be directly perceived, and are not stable over time, contrast with the more 'nouny' adjectives, such as Dimension, in that this type must change morphologically in order to take on noun characteristics. The fact that to

¹⁵ I borrow this term "adding a feature" to describe adjectives from Wierzbicka (1988:484-486)

¹⁶ 'Made-up' examples of *hina* + adjectives of Human Propensity were rejected by informants.

reach 'noun-hood' they must receive additional marking through nominalisation suggests that they are much further away from the notion of noun than are other adjectives. Since the *hina* construction has a predilection for nouns or nouniness, it cannot be used to add an attributive feature to a noun with these adjectives, because of the very transience and invisibility that they embody.¹⁷

The non-perceptual, non-stable characteristics of many members of this type is further referred to in §5.2.1 and §5.4.

4.7 Value

Antonyms *duhu* 'good' and *sati* 'bad' are the two members of this small closed set.

The wide-ranging meanings of *duhu* 'good' encompass 'lovely', 'delicious', 'cute', 'nice' and it is a very high usage word. Only *duhu* 'good' can be used with TA *le*:

- (32) *Le duhu*
TA good
'It's fine/alright.' (lexicalised as colloquial expression)

- (33) **Le sati*
TA bad
'It's bad.'

If one wants to say 'It's bad', then *mo sati* must be used. And only *duhu* can be nominalised, with a causative prefix and the same nominalising suffix as used with verbs and the Human Propensity adjectives. Thus, *duhu* 'good' → *vai-duhu-a* 'goodness'.

The two Value adjectives can be qualified for degree by the verbal *mo liu* 'it exceeds/it wins', as in *mo duhu mo liu* 'it's better/the best', for example:

- (34) *Siba niala mo duhu mo liu mwede nian.*
knife that 3SG good 3SG exceed particular.one this
'That knife is better than this one.'

Both can be intensified by use of intensifiers *asena* or *tina* as in *mo sati asena* 'it's very bad', *mo duhu tina* 'it's really good'.

Both can also be reduplicated, *duhu* for an intensity of meaning, as in the following:

- (35) *Nia mo loli hinau duhu-duhu.*
IP:3SG 3SG do thing RED-good
'He did wonderful things.'

Adjective 'bad' can also reduplicate (*sati* → *sa-sati*), not for intensity, but for a variation in meaning as shown:

- (36) *Peter mo sati.*
Peter 3SG bad
'Peter's bad.'

¹⁷ As mentioned in §2, adjectival words in Tamambo can equally be classed as subsets of verbs or nouns; these 'adjectives' of Human Propensity would then be regarded also as a subset of intransitive verbs.

- (37) *Peter mo sa-sati.*
 Peter 3SG RED-bad
 'Peter's dead.'
- (38) **Nia tamalohi sati.*
 IP:3SG person bad
 'He's a bad man.'
- (39) *Nia tamalohi sa-sati.*
 IP:3SG person RED-bad
 'He's a bad/selfish man.'

Thus, as a verbal predicate, *sati* means 'bad', but cannot be used as an attribute. As an attribute, the reduplicated form *sasati* means 'bad', 'selfish', but used predicatively, can mean 'dead' as in (37) or 'bad to', as in the following:

- (40) *Mo sa-sati telei-au.*
 3SG RED-bad PREP-O:1SG
 'He's bad to me. (i.e. treats me badly)'

The Value adjectives commonly function in the syntactic frames of attribution and predication. But only *duhu* is attested as occurring with the *hina* construction, and only with non-human nouns. Similarly to adjectives of Human Propensity, I suggest that this is because the value judgements of 'good' and 'bad' are regarded as features of humans which other people cannot actually 'see'. The fact that someone is visible does not indicate whether s/he is a 'good' person. However, the feature 'good' can be regarded as 'visible' in some cultural contexts on Malo with some non-human entities. This is discussed further in §5.4.3.

4.8 Distribution and specification for semantic types of adjectives

The following table is an expansion of Table 2, summarising the distribution and category specification of adjectives according to semantic types, as described in §4.2 to §4.7.

Table 3: Morphosyntactic categories and functions of common nouns, verbs and adjective types

Morphosyntactic categories and functions	Common NOUNS	← ADJECTIVES →						VERBS
		Dimen-sion	Physical property	Colour	Age	Human propensity	Value	
Core argument of verbal clause	yes	no	no	no	no	no	no	no
Predicate of non-verbal clause	yes	yes	no	no	no	no	no	no
Can function in a PP with preposition <i>hina</i>	yes	yes	some	yes	yes	no	sometimes	no
Modifies nouns with no linking suffix	rarely	yes	yes	yes	yes	yes	yes	rarely
Modifies verbs with no linking suffix	no	yes	no	no	no	no	no	no ¹⁸
Plurality marked morphologically	some	yes	no	no	no	no	no	no
Can take possessive suffix	yes	yes	no	no	no	no	no	no
Derived from noun	no	no	no	most	no	no	no	some
Degree periphrastically marked	no	yes ¹⁹	yes	no	no	no	yes	yes
Can be nominalised	no	no	no	no	no	yes	1 only	most
Can be modified with intensifiers <i>asena/tina</i>	no	yes	yes	no	no	yes	yes	yes
Takes TAM marking	no	yes	yes	no	no	yes	1 only	yes
Predicate of clause (intrans.verb-type)	no	yes	yes	yes	yes	yes	yes	yes

5 Grammatical variation with semantic types and discourse functions

In §3, the three different syntactic possibilities for adjectives were outlined, as verbal predicates, as attributes of nouns and as prepositional objects following *hina*. In §4, the semantic types of adjectives were discussed. This section now brings together those two

¹⁸ As stated for Table 2, this excludes words classed as phrasal adverbs or in serial verb constructions.

¹⁹ Degree also marked by direct possessive constructions with this semantic type.

previous sections by looking at how those grammatical possibilities translate into different functions in discourse, according to the semantic type.

The discourse functions are discussed according to the following order of grammatical possibilities for adjectives, as outlined in §2 and expanded here:

- (1) as a predicate in a verbal-type clause
- (2) as an attribute
 - (i) as part of a predicate in a non-verbal clause
 - (ii) as part of an NP in a verbal clause
- (3) with *hina*
 - (i) as a predicate in a non-verbal clause
 - (ii) as a subsidiary predicate
 - (iii) as part of an NP in a verbal clause

Examples of all semantic types which are allowable within that grammatical variation are listed and the semantic type is shown above each example.

5.1 Adjectives functioning as predicates (verbal-type clause)

This type is straightforward and plentiful. The adjectives predicate some feature of a referent and adjectives can occur from all semantic types discussed in §4. In some examples the subject NP is omitted and only the preverbal subject pronominal remains.

Dimension

- (41) *Mo-iso tovana no-da skul mo tawera.*
 3SG-finish now CLFR-P:1PLE school 3SG big
ololoa mo iso, ololoa mo-tete.
 respect 3SG finish respect 3SG-NEG
 'So then now our church²⁰ is big, respect is finished, there's no respect.'

Physical property

- (42) *Reu mo tutun.*
 water 3SG hot
 'The water is hot.'

Colour

- (43) *Bula-ku vuria ridi majihi-na mo lulu mo iso*
 CLFR-P:1SG dog REF colour-P:3SG 3SG white 3SG finish
domi-na mo vuriha.
 neck-P:3SG 3SG black
 'As for that dog of mine, his colour was white and then his neck was black.'

²⁰ Bislama word *skul* is often used for 'church' as well as 'school'.

Age

- (44) *Mo-le ovi ana vanua tawera niala, mo haraba.*
 3SG-TA live PREP house big that 3SG new
 'He lives in that big house, it's new.'

Human propensity

- (45) *Na mangisi matan na lai na manu.*
 3PL happy because 3PL take ART manu
 'They were happy because they caught the *manu* (kind of flying fox).'

Value

- (46) *Mo re, "Aaa udu-ku mo sati ro ku hani-a sohena."*
 3SG say aah tooth-P:1SG 3SG bad thus 1SG eat-O:3SG the.same
 'He said, "Aah, my teeth are bad and so I ate it like that."'

In all instances, the adjective is adding a new feature to a referent, but that referent is already introduced into the discourse. For example, in (41), the church had already featured in the conversation, but its size, as a reason for the decline of 'respect', was a new feature; in (43), the speaker had already been talking about her pet dog, but its colour was new to the description; in (46) the teeth (of the 'big devil' in the story) had already been commented on for their size but their attribute of decay (as 'bad') was surprising news to the other protagonist in the story, and so on. Thus, adjectives used as predicates, in the same kind of structure as an intransitive verbal clause, add a feature to a referent in discourse, but the referent itself is not new information.

5.2 Adjectives as attributes**5.2.1 Adjectives as part of a NP predicate in a non-verbal clause****Dimension**

- (47) *Mo iso ana bongi atea, nia lafet²¹ tawera*
 3SG finish PREP day one IP:3SG party big
tutunu-a tawera, ana jara tinabu.
 cook-NOM big PREP place different
 'Then one day there was a big party, a big feast, in a different place.'

Physical property

- (48) *"O, iau aiso, na re iau mara suiha."*
 oh IP:1SG perhaps 3PL say IP:1SG man strong
 'Oh, me perhaps, they say I'm a strong man.'

²¹ Bislama word derived from French. The speaker then adds an appositional phrase as a Tamambo 'translation' equivalent.

Value

- (49) *Ne asua nira tamalohi duhu...*
but nine IP:3PL person good
'But nine of them were good men...'

In the following conversational example, one of the speakers is trying to identify a person. The adjective helps to categorise a kind of person in order to assist the identification.

Dimension

- (50) *Nia mara busohi atea?*
IP:3SG man short one
'Is he a short man?'

In such uses, the attributive adjective carries much of the predicative information; for example, in (48), (49) and (50), the feature is used to categorise the 'kind' of man or men. This adjectival use thus ascribes a feature to categorise or to identify a kind of person or thing. Because of its discourse function, it is most commonly used with adjectives which can ascribe an identifying feature over time, so it is unsurprising that there are few examples in the data with adjectives of Human Propensity, presumably because many adjectives such as 'jealous', 'happy', describe more fleeting qualities. However, when the feature is regarded as more permanent, a feature such as being friendly or selfish or kind, then this type of construction is acceptable to Tamambo speakers, as is shown:

Human propensity

- (51) *Nia vavine manamana.*
IP:3SG woman friendly
'She's a friendly (kind of) girl.'

I have very few examples of this type with adjectives of Age, but they are possible:

Age

- (52) *Nia tahisa-ku tuai.*
IP:3SG friend-P:1SG of.old
'She's an old friend of mine (a friend for a long time).'

Contrary to my expectation, there are no examples in my data with adjectives of Colour as part of a non-verbal predicate, suggesting that colour, as a feature, is not something that is used to categorise a *kind* of thing. Since colour is a stable kind of feature, this seemed initially surprising, but similarly to adjectives of Age, I suggest that this is so because many specific nouns exist which already incorporate the colour. That is, the noun itself specifies the kind of thing, for example, *ngandi* 'black ant', *kala* 'green lizard', *dangilala*, 'green snail' and so on.

5.2.2 Adjectives as an attribute of a NP argument in a verbal clause

Where adjectives are attributes of nouns in verbal clauses, the NP introduces a new referent into the discourse. The feature carried by the adjective is part of the 'package', part of what Croft (1991:123) describes as setting up a "cognitive file for the referent". The most commonly used adjectives in such 'packages' are those of Dimension, Physical Property, and sometimes Colour, all perceptible features, to a greater or lesser degree. Note that where adjectives are used as attributes, the preference of native speakers is to use no more than one following the noun.

Adjectives of Human Propensity are not able to be used to introduce a new participant, presumably because such adjectives are not sufficiently a part of some referent to be part of their initial file. Similarly, Value adjectives are not used attributively for referents that are new. When they are used attributively, they occur only in non-verbal clauses (see §5.2.1) and describe an established referent as a particular kind. Perhaps this is because a referent has to be developed in discourse before it can merit the more permanent feature which an attributive adjective indicates in a non-verbal predicate.

Dimension

- (53) *...na-le hao na vu-baka tawera atea.*
 3PL-TA climb ART tree-banyan big one
 '...they were climbing a big banyan tree.'

Physical property

- (54) *Ku-le tunu na toa baranga-te.*
 1SG-TA roast ART chicken thin-DIS
 'I'm cooking the skinny chicken, eh.'

Colour

- (55) *O soari na mwata vuriha!*
 2SG see ART snake black
 'Look at the black snake!'

Age

- (56) *Mo loli na vanua haraba no-ni votabaluhi-na.*
 3SG make ART house new CLFR-LINK wife-P:3SG
 'He made a new house for his wife. (lit. he made his wife's new house)'

Thus adjectives as part of an NP, as an argument of a verbal clause, carry much of the information load about the new referent being introduced into discourse.

5.3 Some variations

There are some variations which seem to have to do with the nature of attribution and predication, which show up in minimal pairs. In §5.1 where a feature is added to a previously introduced referent, and in §5.2.1 where a referent is identified as a 'kind', it is not always a question of whether the referent is established or otherwise. What can be important for the speaker, in particular contexts, is to convey a distinction in the permanent or transient nature of the feature. If a feature is ascribed to someone attributively, it has different semantic

connotations from where it is used as a predicate. For example, the following example intimates that the woman is consistently and reliably truthful.

- (57) *Nia vavine retiduhu.*
IP:3SG woman truthful
'She's a truthful (kind of) woman.'

Alternately, a predicative use would mean that the woman is being truthful at that time, even although she may not always be so, for example:

- (58) *Vavine mo retiduhu.*
woman 3SG truthful
'The woman's telling the truth./The woman's truthful.'

Similarly, if one looks back to example (2), it can be seen that the speaker is categorising the pig as a particular kind of pig, and may be pointing it out as a matter of interest, or as a warning, depending on the context. If, however, they were to use the example given in (1), then they are indicating that the pig is behaving in a wild manner right then and there, regardless of whether it may have been totally placid five minutes earlier.

Some adjectives of Physical Property which would seem semantically as if they are quite transient by nature, can also be used to denote a more permanent quality. For example, the term 'hot' can be used in different frames for a temporary or more permanent sense.

Where the adjective functions as a predicate, it suggests that the water at that time is hot:

- (59) *Ka noha reu, mo tutun.*
1PL have water 3SG hot
'We have water and it's hot.'

But in the following example, of the type described in §5.2.2, where noun+adjective function as an argument of the verb, it means that having hot water is a continuing state of affairs.

- (60) *Ka noha reu tutun.*
1PL have water hot
'We have hot water.'

This is not just a matter of a new feature and a new referent, but a kind of continuing quality conveyed by the attribution.

Such observations are hardly surprising. A similar pattern exists in English, as described by Bolinger (1967:8-14). With regard to Oceanic languages, Lichtenberk (1983:329) describes a similar semantic difference in Manam, where "adjectival predicators indicate more permanent qualities, while verbal predicators indicate more temporary qualities". Also for Paamese, Crowley (1982:97) discusses how an "adjectival derivative *ta-* can be added to a stative verb stem to indicate that the quality is either a permanent or inherent characteristic...whereas...the verb as an adjunct...expresses an impermanent or incidental property of something".²²

²² But note that in both Manam and Paamese, adjectival predicators and verbal predicators do not always have the same form.

So it seems that in Tamambo, adjectives as attributes reflect a more permanent quality, whether they are in verbal or non-verbal clauses, and adjectives as predicates usually reflect a more transient quality.

5.4 Adjectives with *hina*

The special discourse function of *hina* + adjective where it is adding a feature to a referent, is always to single out a particular distinguishing feature of that referent. It is either to identify the referent or to emphasise that feature above all others. Note that the *hina* construction does not co-occur with an intensifier. I suggest this is because *hina* + adjective always emphasises a feature, and since one particular type of emphasis is intensity, the *hina* construction has the effect of replacing any intensifier.

Most importantly, the feature preceded by *hina* must be conspicuous, which depends on the semantics of the adjective used. If the feature is not obvious by sight (or occasionally by ear) to both speaker and listener, *hina* is not used. Thus adjectives of Human Propensity are not acceptable,²³ since presumably one cannot verify by sight whether the human referent is jealous or happy or lazy. Interestingly, there is some limited use of Value adjectives with the *hina* construction, but only ever with non-human referents where the feature is regarded as a visible one, as is shown in §5.4.3.

The fact that the feature of the referent must be able to be evidenced if *hina* is used, means that the feature has some idea of permanence or time-stability about it, a more noun-like quality which is exemplified in the adjective used. It is not then surprising that Dimension adjectives are most often used; size is an easily visible property, and the characteristics of that adjective type, as listed in Table 3, show that it shares many morphosyntactic traits with nouns. And from a discourse point of view, *hina* + adjective, in any syntactic frame, is used where the speaker wishes to *emphasise* a feature.

5.4.1 Adjectives in a *hina* PP as a clausal predicate

The *hina* construction as a predicate in a non-verbal clause has been shown briefly in §3.2.2, but I list here the different semantic types that can be used in such predicates.

The adjective introduces a distinguishing feature of an established referent, something that sets them apart and contrasts them with others of their kind.

Dimension

In the next example from a fable about five chickens named after 'finger names', for example, Thumb, Pointer and so on, the chickens have all been introduced into the story, but the last one of the chickens is distinguished by his littleness.

- (61) ...*atea hisa-na evui-na-na 'Taharo', nia hina vorivori,*
 one name-P:3SG end-NOM-P:3SG Taharo IP:3SG PREP little
mara vorivori.
 man little
 '...the last named one was Taharo, he was little, a little man.'

²³ See footnote 16.

In the following example, the whole area has already been introduced into the explanation as the place where the fish were trapped, but the speaker is emphasising the features of different parts of the place:

- (62) *Mo bua-ha asena, lolo mo tawera,*
3SG deep.water-like INTENS inside 3SG big
sala-na hina vorivori...
path-P:3SG PREP little
'It was very deep, the inside was big, and the channel to it was narrow...'
(lit. 'it was very deep-water-like, the inside was big, its path was little')

Physical property

Here, the pig as a referent has been introduced for some time into the narrative, but the physical feature of rawness is shockingly new in the story line.

- (63) *...na te matavosai na hani duru na boe*
3PL NEG can 3PL eat split ART boar
matan boe hina baro.
because boar PREP raw
'...they couldn't chew through the pig because the pig was raw.'

Similarly in each of the following, the referent is not new, but the new feature, a perceptible one, is introduced to stress that particular property.

Colour

- (64) *Vulu-na hina vuriha.*
hair-P:3SG PREP black
'His hair is black...'

Age

- (65) *Truk mo duhu, enjin hina haraba mo walau asena.*
truck 3SG good engine PREP new 3SG run INTENS
'The truck's good, the engine is new and it runs fast.'

There are no clausal predicates with *hina* attested as occurring with either Human Propensity or Value adjectives. Those with Dimension and Colour adjectives are relatively common in my data; those of Physical Property and Age are uncommon.

5.4.2 Adjectives in a *hina PP* as a subsidiary predicate

This structure has already been introduced in §3.2.2. The only examples attested in my data are those with features of Dimension or Physical Property. As with clausal predicates with *hina*, the construction emphasises a visible distinguishing feature.

Dimension

- (66) ...*ka biri-a mo iso ka wadi-a hina waririhi.*
 1PL grate-O:3SG 3SG finish 1PL roll-O:3SG PREP PL.little
 ‘...we grate it and then we roll them²⁴ really small.’

Physical property

- (67) *Mo hani-a hina baro.*
 3SG eat-O:3SG PREP raw
 ‘He ate it raw.’

This next example comes from an explanation as to various ways of making fishing nets, so the physical feature of looking ‘different’ can be seen.

- (68) ...*tua-na na loli-a hina tinabu...*
 some-P:3SG 3PL do-O:3SG PREP different
 ‘...some of it they made different...’

5.4.3 Adjectives with *hina* within a NP

In this type of construction, *hina* + adjective is the attribute modifying a noun, and the NP is a core argument of the verb.

Adjectives can be from all semantic types except those of Human Propensity, as explained in earlier in §4.6. All these uses of *hina* with adjective make a referent definite, specific and identifiable by emphasising a particular feature. They limit the reference by this emphasis.

Dimension

- (69) ...*mo-iso tadono mo dingi-ra, mo lai mwede*
 3SG-finish devil 3SG chase-O:3PL 3SG take particular.one
hina vorivori...
 PREP little
 ‘...then the devil chased them and caught the little one/ one that was little...’

Physical property

This is the only example in my data where there is not a literally visible feature, but rather the feature is evidenced by ear, and ‘short’ is used in the sense of time.

- (70) *Ro stori hina busohi manihi le iso ro.*
 thus story PREP short only TA finish thus
 ‘So the story that’s just a short one finishes like that.’
 ‘So the story – only short – finishes like that.’

²⁴ This is in reference to a particular kind of small *laplap*, like a spring roll, being made. So although the object pronoun of the verb ‘roll’ is singular, the adjective plural of ‘little’ is used to indicate that quite a few rolls are produced.

Age/Colour

Both of the next two conversational exchanges seek to identify a referent by limiting the reference to particular features:

- (71) Speaker 1: *Heletu mo walau ana mesu.*
 pig 3SG run PREP bush
 'The pig ran into the bush.'
- Speaker 2: *Mwede hina sava?*
 particular.one PREP what
 'Which one? (lit.the one with what?)'
- Speaker 1: *Mwede hina vuriha*
 particular.one PREP black
 'The black one/the one that's black.'
- (72) Speaker 1: *Ku-bo ruru hina sava?*
 1SG-FUT dress PREP what?
 'Which dress will I wear? (lit. I will dress with what?)'
- Speaker 2: *Mwede hina haraba hina hejaha*
 particular.one PREP new PREP blue/green
 'The new green one.'

Value

In the next example, a choice is being made at a local market and the discourse participants emphasise the feature desired in their proposed buying of an object by using the *hina* construction.

- (73) *O lai na dam hina duhu!*
 2SG take ART yam PREP good
 'Get the good yams!/the yams that are good!'

It is understood, within that particular context and between the speakers, that they can agree on whether the yams (or taro or chickens or pigs) are good or otherwise by actually *looking* at them, because of shared cultural knowledge of what designates 'good' for such objects and how one judges such things. But with humans, value features such as 'good' or 'bad' are not regarded as visible properties and any such value judgements, presumably made on other criteria, can only be expressed in different grammatical patterns.

5.5 Summary: grammatical distribution and discourse function correlated with semantic type

The data show that

- (1) Adjectives as predicates in verbal-like clauses occur across all semantic types and introduce a new and often impermanent feature to an established referent, often "sequentially scanning a scene" as Croft says (1991:123). They make up the most frequent use.

- (2) An adjective within an NP predicate categorises a referent as a kind, often ascribing a permanency to the feature; adjectives of Dimension, Physical Property and Value, sometimes of Human Propensity, are used. Adjectives of Colour are not attested; those of Age rarely so.
- (3) An adjective within an NP argument of the verb introduces a new referent and a new feature. Such uses are not attested as occurring with adjectives of Human Propensity or Value, but with all other semantic types.
- (4) Preposition *hina* with an adjective, as a predicate in an independent clause or as a subsidiary predicate, stresses a new or particular feature of an known referent. This construction is used with easily visible adjectives, Dimension, Physical Property, Colour and sometimes Age. It is rejected by Tamambo speakers with adjectives of Human Propensity or Value.
- (5) Preposition *hina* with an adjective, as a PP within an NP, limits the reference by emphasising a feature. It is used to distinguish and identify a referent. It is used with the same adjective types as listed in §4 above, but Value adjectives can be used for non-human referents only.

The types of discourse possibilities of the semantic types, as linked to morphosyntactic constructions, are summarised in the following table:

Table 4: Grammatical distribution and discourse function correlated with semantic type

Grammatical distribution and discourse functions	Dimension	Physical property	Colour	Age	Human propensity	Value
Adj. as <u>verbal-type predicate</u> : Introduces a new/transient feature, often of an established referent	yes	yes	yes	yes	yes	yes
Adj. <u>within a non-verbal predicate</u> : Categorises/identifies established ref. as a 'kind'; 'permanent' feature	yes	yes	no	unusual	some	yes
Adj. <u>within an NP argument</u> of verb: Introduces a 'package' of new referent + new (continuing) feature	yes	yes	yes	yes	no	no
<i>hina</i> + adj. <u>PP as a clausal predicate</u> or <u>subsidiary predicate</u> : Emphasises a visible feature which distinguishes established referent	yes yes	yes yes	yes no	unusual no	no no	no no
<i>hina</i> + adj. <u>PP within an NP argument</u> : Identifies a (new) referent by a visible, distinguishing feature	yes	yes	yes	yes	no	limited to non-human referents

6 Implications for lexical categorisation

How does data from Tamambo fit in with Thompson's proposals mentioned in §2? I refer specifically to her claims regarding the 'categorisation' and 'functions' of Property

Concept words being explained by their use in discourse. Thompson (1988:259) suggests that the two main functions of Property Concept Words are "(i) to predicate a property of an established discourse referent or (ii) to introduce a new referent into discourse".

This would certainly hold true for adjectives in Tamambo. As in Thompson's study, the main use of adjectives in my data is "to predicate a property of an established discourse referent". In Tamambo, this can occur with adjectives as an adjectival predicate (§5.1 and §5.2.1) or with *hina* in a prepositional predicate (§5.4.1 and §5.4.2). As for the second function, "to introduce a new discourse referent", Tamambo adjectives can introduce a new referent+feature package (§5.2.2), although it does not seem to be particularly common in data. It has been suggested by Malcom Ross (pers. comm.) that the lack of examples for this type could be culturally conditioned, in that there is less need to introduce referents denoted by a distinguishing feature. The other function of an adjective which Thompson (1988:256) briefly mentions is "reidentifying or distinguishing a referent", a use she finds very rarely in her study.²⁵ This would contrast with the comparatively common use in Tamambo of *hina* + adjective in an NP to identify or distinguish a referent (§5.4.3).

With reference to categorisation, she argues (1988:260) that "Property Concept words tend to share features with nouns and verbs cross-linguistically...", and again, the Tamambo data would support her claim, as shown in Table 2. Thus her argument for a discourse explanation for the function of 'Property Concepts', and the sharing of features with nouns and verbs, is certainly borne out by data from this Oceanic language.

However, Thompson's assertion (1988:251) that "the explanation may not be found in semantics at all" is not a necessary corollary of a discourse explanation. With regard to this, she makes two linked statements in support of her 'discourse only' explanation that I question:

- (1) that "all of Dixon's seven 'semantic types'...denote relatively stable characteristics... thus it does not appear to be true that 'adjectives occupy the middle of the time stability scale' " (1988:251), as Givón (1984) had previously posited. Her argument is that:
- (2) "...since semantically, Property Concept words denote stable percepts like Nouns do...the widespread tendency to categorize Property Concepts as Verbs remains unaccounted for" (1988:260).

First, I think it is quite clear that adjectives do not uniformly denote "relatively stable characteristics" or "stable percepts like Nouns do", as Thompson says. Of course, some of them do so, but adjectival concepts can run the gamut of recognised permanent, stable features such as great size or inherent goodness, through to often quite transient features such as 'naughty', 'jealous', 'happy', or even the rapid changes of many physical features, such as 'light', 'dark', 'hot', 'cold', and that this is reflected grammatically.

Second, the notion of some sort of permanence in time, or otherwise, what Givón (1984:14) calls 'time stability', and his suggestion that "within the same language, some adjectives – the ones depicting more temporary states – behave more like verbs, while others – depicting more inherent – permanent properties – behave more like nouns" is certainly true of Tamambo, as shown in Table 3 and discussed in §4 and §5. In fact, it seems to me that the

²⁵ Thompson claims one example out of 308 examples of adjective use (1988:256).

concept of a feature depends critically on whether it is stable or fleeting, when it is applied to a particular referent.

Thompson (1988:260) concludes that cross-linguistically, the "sharing of Verbal and Nominal functions in discourse provides an *explanation* (my emphasis) for the fact that sometimes Property Concepts will sometimes be categorised with morphosyntactic properties similar to those of Verbs and sometimes with morphosyntactic properties similar to Nouns, while sometimes, since they are neither prototypical Nouns nor prototypical Verbs, they are categorised as a separate class of Adjectives". I would agree. But whilst use in discourse explains the function of adjectives to predicate a property, introduce or re-identify a referent, I would suggest that indeed some explanation for categorisation is also found in semantics. Time stability, permanence and transience apart, the other criteria of visibility, of 'concreteness' or abstraction, whether something can be actually seen and distinguished, are further characteristics of different semantic types which are directly reflected in adjective use in Tamambo, as shown in §5 and summarised in Table 4.

So, use in discourse, as reflected in morphosyntactic behaviour, can explain much about the lexical category 'adjective', as has been insightfully demonstrated by Thompson. But speakers do not discard their intuitive notions of the semantics of a feature when they apply an adjective to a referent, and this too is reflected in grammatical behaviour. An 'explanation' for any sort of lexical categorising must take credence of variation in both discourse and semantics, both based firmly on morphosyntactic evidence.

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10 *Some Raga vocabulary for terrestrial invertebrates, reptiles and mammals of North Pentecost*

D.S. WALSH, RICHARD LEONA, WENDY POND

1 Introduction

This paper presents some Raga vocabulary for terrestrial invertebrates, reptiles and mammals of North Pentecost. The vocabulary is here associated firstly with lay English glosses, some literal translations, and the etic framework of zoological classification, and secondly with an emic grouping of the Raga taxa. As this is very much an exploratory initial approach to the topic, any citation of this material should acknowledge its tentative and provisional status.¹

1.1 Locale, topography and vegetation

Pentecost Island, in north-eastern Vanuatu, between 15°23' and 16° south, and between 168°4' and 168°14' east, is so named because Cook sighted it on Whit Sunday in 1774. Its local names, Raga and Arag, have been effectively supplanted by Pentecost, despite some general post-independence pressures to localise introduced place names. The island is about 58 kilometers from north to south, and up to 13 kilometers from east to west.²

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- ¹ Fieldwork and research relevant to this paper by Walsh and Leona have been funded in varying proportions and at various times by the Australian Research Grants Committee, the University of Sydney, The Australian National University, and the Myer Foundation. Pond's research was supported by the New Zealand Lottery Grants Board, Te Puna Tahua.
- ² Bregulla (1992:21-43) provides a useful general description, by Marcus Chambers, of the geography, geology, climate, etc. of Vanuatu.

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The northern and central regions consist primarily of raised coral limestone, reaching up to about 940 meters above sea-level in the central region, while the southern region consists in part of raised coral limestone, and in part of various volcanic rocks. Much of the eastern weather coast is rugged and inhospitable, with extensive cliffs, and is frequently pounded by the turbulent *tahi mauri* '(the) sea (that is) alive/living'; while the western lee coast is predominantly gentler, with many small sandy beaches lapped by the usually placid *tahi mate* '(the) dead/calm sea'.

The northern third of Pentecost is the homeland of about 3,500 speakers of the Raga language. This region has smallish areas of flat land on the western and northern coasts, an undulating plateau of between about 150 and 200 meters above sea-level in the northern eight kilometers, and a higher undulating plateau of between about 250 and 320 meters above sea-level in the southern part. Most of the Raga people live in villages on the northern and western coastal land, on the plateaux, and, as a result of recent increasing pressure of population on cultivable land, on the less accessible and more mosquito-ridden eastern coastal region.

The natural forest cover of North Pentecost has been modified in virtually all the easily to moderately accessible areas, and even in some of the less accessible areas, by many centuries of slash-and-burn subsistence horticulture, with yam and taro as the main crops; and has been affected in some (mainly coastal) areas by the planting of coconut trees for copra production. The rotating cycle of subsistence horticulture has created considerable areas of second-growth natural vegetation cover in varying stages of maturity. Four broad etic types of vegetation-complex may therefore be distinguished: coastal; current garden-land; fallow garden-land; virgin forest.

1.2 Language and orthography

The Raga language is a member of a lower-order grouping within the notional Eastern Oceanic (EO) subgroup of East Austronesian,³ and its closest relatives are the languages of north-eastern Vanuatu.⁴

With three exceptions, *bw*, *mw* and *vw*, the Raga orthography used here has one-letter-one-phoneme values. The broad articulatory qualities of the phonemes are summarised in Tables 1 and 2.⁵

Table 1: Raga vowels

	Front	Central	Back
High	<i>i</i>		<i>u</i>
Mid	<i>e</i>		<i>o</i>
Low		<i>a</i>	

³ The basis for, and the composition of, EO are considered in Biggs (1965) and Pawley (1972).

⁴ The relevant lower-order groupings of the languages of northern and central Vanuatu are considered in Tryon (1976:79-93) and Walsh (1982a).

⁵ Further information on Raga phonology may be found in Walsh (1962, 1966, 1982a and 1982b). There is an outline of Raga morphosyntax in Walsh (1995).

Table 2: Raga consonants

In this table V =voicing, L =labio-velarised release, and H =homorganic pre-nasalisation. After *nasal + vowel (+ vowel)* the bilabial stops *b* and *bw* and the alveolar stop *d* are homorganically pre-nasalised. When *b* is pre-nasalised it is realised as +V rather than $\pm V$.

	Bilabial	Labio-dental	Labio-velar	Alveolar	Velar	Pharyngeal
Stops						
-V				<i>t</i>	<i>k</i>	
+V				<i>d</i>		
$\pm V$	<i>b</i>					
+V+L	<i>bw</i>					
+V+H					\bar{g}	
Fricatives						
-V				<i>s</i>		<i>h</i>
$\pm V$		<i>v</i>			<i>g</i>	
$\pm V+L$		<i>vw</i>				
Nasals						
+V	<i>m</i>			<i>n</i>	\bar{n}	
+V+L	<i>mw</i>					
Lateral						
+V				<i>l</i>		
Trill						
+V				<i>r</i>		
Semivowel						
+V			<i>w</i>			

2 Current knowledge of the terrestrial invertebrates, reptiles and mammals of North Pentecost

The Raga vocabulary presented in §4 and §5 includes over 120 terms for invertebrates, 15 for reptiles and 14 for mammals. Of these terminologies, those for mammals and reptiles are probably close to being exhaustive, while that for invertebrates is certainly not exhaustive and may well be far from being so.

With the exception of birds (Bregulla 1992) and mammals (Flannery 1995), the fauna of North Pentecost has not yet been described in etic zoological terms. This situation is consistent with the general state of zoological description for the fauna of Vanuatu, where, again with the exception of birds (Bregulla 1992) and mammals (Flannery 1995), the best that can be said is that there is some description for some of the fauna on some of the islands.

O'Reilly (1958:70-85) provides a listing of pre-1958 zoological publications on various portions of the fauna of Vanuatu. Major zoological studies of portions of this fauna published since 1958 include: Gross (1975) for invertebrates, Medway and Marshall (1975) for vertebrates, Bregulla (1992) for birds, and Flannery (1995) for mammals.

Gross, Medway and Marshall were members of the 1971 Royal Society – Percy Sladen Expedition to the New Hebrides. They collected on six islands: Espiritu Santo (including Malo and Aore), Malekula, Efate, Erromanga, Tanna and Aneityum. Gross (1975:409) found that for invertebrates there was “some tendency for the three southern islands, Erromanga, Tanna, and Aneityum, to share species which do not occur in the northern islands of Espiritu Santo, Malekula, and Efate, and for these northern islands to share species which are not known in the south.” Although Medway and Marshall do not expressly say so, it is likely that a similar situation exists for vertebrates.

Flannery, in what is by far the most comprehensive description yet published of the mammals of the south-west Pacific region, indicates for which island or islands in Vanuatu a given species has been zoologically recorded. However, as he points out (1995:12) “Much work remains to be done in documenting the diversity of mammals in the region”.

2.1 Invertebrates

The Raga vocabulary for terrestrial invertebrates in §4 and §5 includes terms for various intestinal worms, land snails, land slugs, earthworms, leeches, millipedes, centipedes, dragonflies, grasshoppers, crickets, stick insects, earwigs, cockroaches, praying mantids, termites, lice, shield bugs, cicadas, plant hoppers, ant lion larvae, butterflies, moths, crane flies, mosquitoes, midges, houseflies, blowflies, fruit flies, ferment flies, ants, beetles, woodlice, sand hoppers, land crabs, fresh-water crayfish, scorpions and spiders.

The 1971 Royal Society – Percy Sladen Expedition “had as one of its outstanding results the collection of large numbers of land invertebrates...(including) many thousands of specimens of nematodes, oligochaetes, mites, collembolans and insects.” (Gross 1975:391). For insects alone more than 17,000 specimens were collected. Gross selects five groups “for which our studies and knowledge are presently quite advanced, and have used these as ‘index groups’ to indicate what may be expected from the entire collection when its analysis is further advanced. The groups selected are the Oligochaeta (earthworms), Isoptera (white ants or termites), Dermaptera (earwigs), the suborder Heteroptera of the order Hemiptera (bugs) and the Rhopalocera (butterflies) of the order Lepidoptera.” (1975:391). The extent of his findings for each of these groups is summarised at the appropriate points in §4.

For groups of invertebrates other than his five index groups Gross (1975:409, 419) notes Yeates (1972 and 1973) who examined 14 of the expedition’s soil samples and found 71 nematode species in 59 genera; Greenslade (n.d.) who found about 30 *Collembola* species in about one third of the Expedition’s 38 soil samples; and Solem (1958) who distinguishes for Vanuatu 57 endemic land snail species in 24 genera.

2.2 Reptiles and mammals

The Raga vocabulary in §4 and §5 includes terms for terrestrial reptiles and mammals. The reptile vocabulary contains three terms for turtles, one for crocodiles, eight for lizards

(skinks and geckos) and three for snakes. The mammal vocabulary contains seven terms for bats and seven for various introduced mammals (rats, dogs, cats, pigs and cattle).

Medway and Marshall's overview (1975:423) states that "The known terrestrial vertebrate fauna of the New Hebrides consists of 16 species of mammals (excluding feral domestic stock), 61 species of resident land- and fresh-water birds, 20 species of reptiles and one amphibian. Of these, three, five, four and one species respectively have apparently been introduced by man." The Raga vocabulary for birds has been described in Walsh and Leona (1996).

On amphibians, Medway and Marshall are unequivocal (1975:443-444) with "There are no amphibians native to the New Hebrides, and none was taken by Dr Felix Speiser who collected herpetological material in these islands in 1910-12 (Roux 1913). Subsequently, *Litoria aurea* (Lesson) has been introduced by planters, ostensibly to control mosquitoes." This introduced Australian species, the Green and Golden Bell Frog, although "it is now present in enormous numbers on the New Hebridean islands of Efate, Malekula and Espiritu Santo" (Tyler 1976:181), does not yet seem to have found its way to North Pentecost.

The various reptile and mammal species which Medway and Marshall collected or noted as recorded for one or more of the northern and central islands of Espiritu Santo, Malekula and Efate may have relevance for Pentecost. For these islands their listed reptile species (1975:460) included four geckos, ten skinks, and two snakes; and their listed mammal species (1975:453) included three fruit-eating bats, eight insectivorous bats, three rats and one mouse. The extent of their specific identifications is noted at appropriate points in §4.

For mammals, Flannery (1995:15) lists nine bat species as indigenous (native but not unique) to Vanuatu, and two as endemic (native and unique) to Vanuatu. The indigenous species include two fruit-eating bats and seven insectivorous bats, and the endemic species include two fruit-eating bats. Two of the fruit-eating bats, one indigenous and one endemic, are recorded as present on Pentecost. The extent of his specific identifications is noted at appropriate points in §4.

3 Collection and glossing of the Raga data

Two collections of Raga faunal vocabulary have provided the basis for this study. The first corpus was collected by Walsh and Leona, in consultation with a considerable range of Raga speakers, during primarily lexicographic fieldwork on Pentecost at various times between 1969 and 1986. This corpus consists of Raga forms with lay English glosses, some literal translations, descriptive notes, and, in a few cases, tentative zoological glosses based on identifications by Raga speakers of labelled faunal specimens in the Vanuatu Cultural Centre Museum. In compiling §4, this first corpus has been used as a crosscheck and supplement to the second corpus, the provenance of which is described below.

In January 1988, when David Walsh and Richard Leona were in Auckland, New Zealand, for the Fifth International Conference on Austronesian Linguistics, Wendy Pond and Richard Leona, assisted at times by Richard's wife, Lolowia Leona, and David Tau, a young Raga speaker who was at that time training as an entomologist for the Vanuatu Quarantine and Inspection Service, collaborated on the compilation of a list of Raga names for invertebrates, reptiles and bats. For the identification of arthropods in the list they were fortunate in having access to the Pacific region specimens in the Arthropod Collection at the Mount Albert Research Centre, where Dr Peter Madison, Pacific Entomologist at the

Department of Scientific and Industrial Research, contributed his invaluable breadth of knowledge of both faunal composition and Pacific usage. David Tau contributed both general insights and some detailed information on the Raga labelling and the zoological classification of fruit flies, and Lolowia Leona provided insights deriving from a Raga woman's perspective on some sectors of the fauna. During the compilation of this corpus David Walsh maintained a linguistic check on the Raga data.

Wendy Pond (1988), using the information gained in these sessions, then compiled a list of Raga vocabulary for invertebrates, reptiles and bats. In this list the Raga taxa are glossed and descriptively correlated with higher level zoological classificatory groupings. The list of insects reflects the categories which she had so far found to be significant during her comparative work on Austronesian classification of the biota. It is not a comprehensive or exhaustive inventory of the North Pentecost insect fauna, nor is it a comprehensive or exhaustive list of the insect categories known to Raga speakers. Neither of these objectives can be realised until entomologists and Raga nature history experts work together in the field.

4 Raga taxa grouped in terms of zoological classification

In this section glossed Raga taxa are associated with the broad higher-level groupings of the etic framework provided by zoological classification, following Pond (1988) and the nomenclature and ordering of Larousse (1967:614-617). Where possible, some associations, usually tentative, of individual Raga taxa with lower levels of zoological classification are suggested.

The Raga forms and glosses are derived from Pond (1988) and from the Walsh and Leona corpus. For each Raga form there is a lay English gloss, often supplemented by descriptive notes. Where the meaning associated with a given form contains detectable metaphor (see Walsh 1980:132-135 and Pond 1994:109-117) a literal gloss is provided. Pond's research suggests that names for flora and fauna in Austronesian languages are archives of natural history observation (1994:115-119). That this is particularly so when the flora and fauna names are metaphorical is confirmed by the literal glosses in this section, by flora data in Walsh (1980), and by fauna data in Pond (1994).

Most of the form-plus-gloss units in this section are cross-referenced to units in the provisional emic grouping in §5.

In the Raga data a hyphen indicates a morpheme boundary within a word, and (-) indicates a possible such boundary. The labels for Raga taxa are here regarded as words, which, when they are multi-morphemic, may include morphemes and morpheme combinations (e.g. *-borogai* and *-bila-n-* in §4.2) which normally occur as free forms.

Double quotes enclose literal glosses, and single quotes enclose lay English glosses ± provisional lower order zoological classification ± descriptive notes. Where the morphemic structure of a Raga form indicates the likely presence of metaphor, but the literal gloss is not as yet fully or partly determined, this is shown by "...".

The symbol ~ is used to indicate alternants or variants. Where doubt exists concerning a given detail, the symbol (?) follows the detail in question.

The following abbreviations are used in the glosses: sp = species (singular), spp = species (plural), and sp(p) = one or possibly more than one species.

In this section page references from Flannery (1995), Gross (1975), and Medway and Marshall (1975) occur in general text as, for example, Gross (410), and occur in the glosses as, for example, (F15), (G410), and (M&M460).

4.1 Phylum: Platyhelminthes

CLASS: TURBELLARIA (FLATWORMS), TREMATODA (FLUKES), CESTODA (TAPEWORMS)

Phylum: Aschelminthes

CLASS: NEMATODA (ROUNDWORMS)

silosi (1) ‘generic for intestinal worms’; see §4.3.1 and §5.8.1.

gan-lolo “eat-inside”; ‘intestinal worm sp(p), small, white’; see §5.8.1.

siñ(-)siñ-gai(-)gui “drum (slit gong)-...(-)...”; ‘intestinal worm sp(p), possibly hookworm sp(p)’; see §5.8.1.

4.2 Phylum: Mollusca

CLASS: GASTROPODA

SUBCLASS: PULMONATA (SLUGS, SNAILS)

ORDER: STYLOMATOPHORA (LAND SLUGS, LAND SNAILS)

bora ‘land snail sp(p), very small, white’; see §5.9.1.

bora-vudolua “land snail-hundred”; ‘land snail sp(p), brown, lives on *rawalu* (*Monstera deliciosa*)’; see §5.9.1.

bwala-logu “shell-land slug”; ‘land snail sp(p), lives on *rawalu* (*Monstera deliciosa*), *rau-maḡao* (leaf of plant sp) and *rau-bwañoño* (leaf of *Macropiper latifolium*)’; see §5.9.1.

bwala-logu-ata-Afrika “shell-land slug-from-Africa”; ‘land snail sp, African Snail, *Achatina fulica*, introduced by Europeans as a food source, but is now a pest’; see §5.9.1.

logu ~ gina-gan-atmate ~ gin-gan-atmate “food-(of)-ghost/spirit”; ‘land slug sp(p), not eaten by humans’; see §5.9.2.

taiv-bila-n-borogai “conchshell-belonging-to-Banded Rail (*Rallus philippensis sethsmithi*)”; ‘land snail sp(p), small, ground-dwelling’; see §5.9.2.

4.3 Phylum: Annelida (segmented worms)

4.3.1 Class: Oligochaeta (earthworms)

silosi (2) ‘generic for earthworms’; see §4.1 and §5.8.2.

silosi-boe “earthworm-pig”; ‘earthworm sp(p), relatively thick/fat’; see §5.8.2.

silosi-n-tano “earthworm-of-ground” ~ *silosi-ata-lol-tano* “earthworm-belonging-to-in-ground”; ‘earthworm sp(p), relatively thin and long’; see §5.8.2.

Within the annelid class Oligochaeta, Gross (410) lists 16 lower order Megascolecidae taxa and one Glossoscolecidae taxon as collected or recorded for the central and northern islands of the group.

4.3.2 Class: Hirudinea (*leeches*)

rimwa 'leech sp(p)'; see §5.8.2.

4.4 Phylum: Arthropoda (exoskeletons)

4.4.1 Class: Diplopoda (*millipedes*)

kuruket "crooked"; 'millipede sp(p), a recent introduction'; see §5.6.3.⁶

tarou (2) 'millipede sp(p)'; see §4.4.3.2.2 and §5.6.3.

4.4.2 Class: Chilopoda (*centipedes*)

bwalage-vudolua "leg-hundred"; 'centipede sp(p), does not bite humans'; see §5.6.3.

bwan-sere(-)sere "...-...(-)..."; 'centipede sp(p), Scolopendridae, smooth, finger-length, brown and yellow, bites humans'; see §5.6.3.

weli 'centipede sp(p), relatively small, thinner and longer than *bwalage-vudolua*, yellowish, luminous (if broken the exposed ends are phosphorescent), lives under damp places in houses, liable to crawl into human ear'; see §5.6.3.

4.4.3 Class: Insecta (*insects*)

4.4.3.1 Subclass: Exopterygota = Hemimetabola

4.4.3.1.1 Order: Odonata (*damselflies, dragonflies*)

sogorea 'damselfly sp(p), Zygoptera, and dragonfly sp(p), Anisoptera'; see §5.3.

Note also:

gutu-n-wai "louse-of-freshwater"; 'nymph of *sogorea*'.

4.4.3.1.2 Order: Orthoptera (*grasshoppers, crickets*)

bwilo (1) 'generic for a range of grasshoppers and beetles'; see §4.4.3.2.5 and §5.3.

bwil-bwero-vat-mwabwe "grasshopper-ear-stone-Tahitian Chestnut (*Inocarpus edulis*)"; 'grasshopper sp(p)'; see §5.3.

bwil-mara(-)gaba "grasshopper-...(-)..."; 'shorthorned grasshopper sp(p), Acrididae, brown, locust-like'; see §5.3.

⁶ Raga *kuruket* 'millipede sp(p)' is derived from Bislama (the pidgin-creole lingua franca and national language of Vanuatu) *krukud* 'millipede' (Crowley 1990:125). The Bislama form is derived from English *crooked*.

bwilo (2) 'grasshopper sp(p), green, grass-dwelling'; see §5.3.

bwilo-n-mwane "grasshopper-of-grass"; 'grasshopper sp(p), grass-dwelling'; see §5.3.

bwilo-n-rau-gai "grasshopper-of-leaf-tree"; 'grasshopper sp(p), found on leaves of trees'; see §5.3.

bwil-rau-mwabwe "grasshopper-leaf-Tahitian Chestnut (*Inocarpus edulis*)"; 'longhorned grasshopper sp(p), Tettigoniidae, green, thin white wings'; see §5.3.

gagalu 'tree cricket sp(p), large, winged, has spines on back legs, lives in base of dried tree-fern frond, eaten by humans'; see §5.3.

tatau(-)bei "...(-)"; 'grasshopper sp(p), small, long-legged, brown, bush-dwelling'; see §5.3.

4.4.3.1.3 Order: Phasmida (*stick insects, leaf insects*)

taḡalu (1) 'generic for stick insects and mantids'; see §4.4.3.1.5.2 and §5.12.1.

bei(-)gai "...(-)tree(?)"; 'stick insect sp(p)'; see §5.12.1.

taḡalu (2) 'female of stick insect sp(p), relatively large, green, wingless, eaten by humans'; see §5.12.1.

tama-n-taḡalu "father-of-stick insect"; 'male of stick insect sp(p), relatively small, thin, brown, winged'; see §5.12.1.

4.4.3.1.4 Order: Dermaptera (*earwigs*)

ḡere-ḡere-ih (1) "tail-tail-banana"; 'earwig sp, *Chelisoches morico*, very small, black, found on ripe bananas'; see §4.5.2.1.1 and §5.12.2.

Within the order Dermaptera, Gross (411) lists 14 lower order taxa, including *Chelisoches morico* (Fabricus), as collected or recorded for the central and northern islands of the group.

4.4.3.1.5 Order: Dictyoptera (*cockroaches, praying mantids*)

4.4.3.1.5.1 Suborder: Blattodea = Blattoidea (*cockroaches*)

bwih-bwih-bwero "stoop and enter-ear"; 'cockroach sp(p), stinkroach, black'.

ih-mena "banana-ripe"; 'cockroach sp(p), large, brown, when it is squeezed the extruded contents resemble a ripe banana'.

4.4.3.1.5.2 Suborder: Mantodea = Mantoidea (*praying mantids*)

taḡalu (1) 'generic for mantids and stick insects'; see §4.4.3.1.3 and §5.12.1.

me-mere-hi-mata "urinate-on-eye"; 'praying mantid sp(p), brown, winged, large-bellied, emits liquid and odour'; see §5.12.1.

4.4.3.1.6 Order: Isoptera (*termites*)

mwalaalae 'termite sp(p), white, inhabits live trees and eats live green timber, especially *aravoa* (*Boehmeria platyphylla*) and *doudou* (*Trema orientalis*)'; see §5.5.

raerae 'termite sp(p), eats dead timber of house frames, etc.'; see §5.5.

Within the order Isoptera, Gross (410-411) lists 12 lower order taxa as collected or recorded for the central and northern islands of the group.

4.4.3.1.7 Order: Mallophaga (*biting lice*)

gutu (1) 'generic for biting lice and sucking lice'; see §4.4.3.1.8 and §5.4.

gutu-n-manu "louse-of-bird"; 'biting louse sp(p), found on birds'; see §5.4.

gutu-n-toa "louse-of-fowl"; 'biting louse sp(p), found on fowl'; see §5.4.

4.4.3.1.8 Order: Siphunculata (*sucking lice*)

gutu (1) 'generic for biting lice and sucking lice'; see §4.4.3.1.7 and §5.4.

arañ-dalisi "...round"; 'sucking louse sp(p), very small, found on humans, now not common'; see §5.4.

gutu (2) 'sucking louse sp, *Pediculus humanus*, found on heads and bodies of humans'; see §5.4.

gutu-boe "louse-pig"; 'sucking louse sp(p), found on pigs'; note *sususu* below; see §5.4.

gutu-n-buluki ~ *gutu-n-buluk* "louse-of-cattle"; 'sucking louse sp(p), found on cattle'; see §5.4.

gutu-n-bwaratu "louse-of-bat"; 'sucking louse sp(p), found on bats'; see §5.4.

gut-visi "louse-..."; 'sucking louse sp(p), found on dogs'; see §5.4.

sususu 'possibly sucking louse sp(p), found on pigs, but may be distended *gutu-boe*'; see §5.4.

4.4.3.1.9 Order: Hemiptera

4.4.3.1.9.1 Suborder: Heteroptera (*plant bugs, pond skaters, water boatmen, etc.*)

tabwa-tea "dog paddle walk-..."; 'shield bug sp(p), Pentatomidae, emits an offensive odour'; see §5.3.2.

Within the suborder Heteroptera, Gross (412-417) lists 93 lower order taxa, including ten Pentatomidae spp, as collected or recorded for the central and northern islands of the group.

4.4.3.1.9.2 Suborder: Homoptera (*plant hoppers, cicadas, aphids, scale-insects, mealybugs*)

biña 'cicada sp(p), green, transparent wings stand erect, eaten by humans'; see §5.3.1.

gari "..." ~ *gutu-n-gai* "louse-of-tree/timber"; 'scale-insect sp(p), Coccoidea'.

nīdi-nīdi “...-...”; ‘mealybug sp(p), Coccoidea’.

soro(-)soro “...(-)...”; ‘possibly cicada sp(p), lives on *gai-roro* (*Casuarina equisetifolia*), found on east coast at Aligu’.

visi(-)ribi “bounce making sound” (?); ‘taro plant hopper sp(p)’; see §5.13.

4.4.3.2 Subclass: Endopterygota = Holometabola

4.4.3.2.1 Order: Neuroptera (*alder-flies, lacewings, ant lions*)

tot-mwaneā “...-grass”; ‘lacewing sp(p), possibly Chrysopidae and/or Hemerobiidae’.

Note also:

sibwa-taniavu “blunt headed arrow-ashes/dust”; ‘larva of ant lion sp(p), *Myrmeleontidae*, the larva being so named because the hole it makes in the ground to trap its prey resembles that made by a blunt-headed arrow shot at the ground, it is thought by Raga speakers that this larva becomes *mwaraḡeḡe* (1) (crane-fly)’; see §4.4.3.2.3.1.1 and §5.7.

4.4.3.2.2 Order: Lepidoptera (*butterflies, moths*)

bebe ‘generic for butterflies and moths’; see §5.3.

bebe-añoga “butterfly/moth-yellow”; ‘butterfly/moth sp(p), yellow’; see §5.3.

bebe-bwaratu “butterfly/moth-bat”; ‘moth sp(p), Uraniidae, very large, dark-coloured, cave-dwelling, nocturnal’; see §5.3.

bebe-ḡal-ḡalana “butterfly/moth-variegated”; ‘butterfly/moth sp(p), variegated and multi-coloured’; see §5.3.

bebe-huhu “butterfly/moth-suck”; ‘moth sp(p), Noctuidae, fruit-piercing’; see §5.3.

bebe-tibwa(-)tibwa “butterfly/moth-spotted(?)”; ‘butterfly sp(p), blue moon butterfly’; see §5.3.

bebe-ure “butterfly/moth-world”; ‘hawk moth sp(p), Sphingidae’; see §5.3.

Note also:

tarou (1) ‘generic for caterpillars of butterflies and moths’; see §4.4.1 and §5.6.1.

huhu(-)lua (1) “...(-)...”; ‘caterpillar of butterfly/moth sp(p), brown with three black bars, hair/spines caustic to human skin’; see also *talai(-)bala* below; see §4.4.3.2.4.

huhu(-)lua (2) “...(-)...”; ‘cocoon of case moth caterpillar’(?); see §4.4.3.2.4.

tahi-mate-be-tahi-mauri-be “sea-dead/calm-where-sea-alive/living-where”; ‘pupa of hawk moth sp(p), people hold the pupa, tail end up, and ask it this question as the abdomen bends up and down, found in the soil when cultivating gardens, especially yam gardens’.

talai(-)bala “...(-)...”; ‘caterpillar of butterfly/moth sp(p), brown with three black bars, hair is caustic to human skin, found especially on *niu* (coconut palm)’; see also *huhu(-)lua* (1) above.

Within the order Lepidoptera, suborder Rhopalocera, Gross (417-419) lists 50 lower order taxa as collected or recorded for the central and northern islands in the group.

4.4.3.2.3 Order: Diptera (*flies*)

4.4.3.2.3.1 Suborder: Nematocera

4.4.3.2.3.1.1 Family: Tipulidae (*crane flies*)

mwara-gēgē (1) "...stand with arms spread out and bent downwards"; 'crane fly sp(p), found in dark corners of houses, reputedly adult of *sibwa-taniavu* (ant lion larva) §4.4.3.2.1'; see §4.4.5.2 and §5.3.

ratahi-n-namu "mother-of-mosquito"; 'crane fly sp(p)'; see §5.3.

4.4.3.2.3.1.2 Family: Culicidae (*mosquitoes*); Subfamily: Anophelinae; *probably all in genus: Anopheles* (Mittingley 1969:70-82)

namu (1) 'generic for mosquitoes'; see §5.3.

namu (2) 'mosquito sp(p), bites in evening'; see §5.3.

namu-ata-boñi "mosquito-belonging to-night" ~ *namu-n-ute-boñi* "mosquito-of-place-night"; 'mosquito sp(p), active and biting at night'; see §5.3.

namu-borogai "mosquito-Banded Rail (*Rallus philippensis sethsmithi*)"; 'mosquito sp(p), active and biting during day, striped like Banded Rail'; see §5.3.

nam-tutui ~ *namu-tutui* "mosquito-stand upright"; 'mosquito sp(p), bites at night with body in a semi-upright position'; see §5.3.

Note also:

namu-mea "mosquito-red"; 'mosquito filled with blood'; see §5.3.

sigosigo 'mosquito larva'.

4.4.3.2.3.1.3 Family: Chironomidae (*non-biting midges*) and Ceratopogonidae (*biting midges*)

saḡovi-ravi "cluster all over(?)-evening"; 'midge spp, both biting and non-biting, congregate in swarms at evening time, particularly in beach-side locations, appear attracted by lights and the smell of beer'; see §5.3.

4.4.3.2.3.2 Suborder: Brachycera

laño (1) 'generic for flies'; see §5.3.

lañ-lua ~ *laño-lua* (?) "fly-vomit"; 'blowfly sp(p), Calliphoridae, including bluebottle, *Calliphora vicina*'; see §5.3.

laño (2) 'housefly sp(p), Muscidae, probably including *Musca domestica*'; see §5.3.

laño-n-tae "fly-of-excrement"; 'fleshfly sp(p), Sarcophagidae, lays eggs in excrement and in dead meat and fish'; see §5.3.

laño-n-vwai-gai “fly-of-fruit-tree”; ‘fruit fly spp, Tephritidae and possibly Otitidae, lays eggs in fruit, larvae eat fruit’; see §5.3.⁷

mara-nono “fermented breadfruit-move rapidly”; ‘ferment or vinegar fly sp(p), Drosophilidae, found around fermented breadfruit (a famine food)’; see §5.3.

Note also:

ulehi ‘maggot of blowfly, fruit fly, ferment fly’; see §5.8.3.

4.4.3.2.4 Order: Hymenoptera (*ants, wasps, bees*)

butubutu (1) ‘generic for various spp of smaller ants’; see §5.6.2.

gahi (1) ‘generic for various spp of larger ants’; see §5.6.2.

butubut-ata-Ambae “small ant-from-Ambae”; ‘ant sp(p), small, brown, reputedly from Ambae’;⁸ see §5.6.2.

butubut-maita “small ant-white”; ‘ant sp(p), small, whitish’; see §5.6.2.

butubut-me(-)mea “small ant-red”; ‘ant sp(p), small, red, stinging, ground-dwelling’; see §5.6.2.

butubut-meto “small ant-black”; ‘ant sp(p), small, black, with painful sting, tree-dwelling’; see §5.6.2.

butubutu (2) ‘ant sp(p), small, brown, non-stinging, attracted into houses by sugar, etc.’; see §5.6.2.

butubutu-n-suka “small ant-of-sugar”; ‘ant sp(p), very small, attracted by sugar, recently introduced’; see §5.6.2.

gahi (2) ‘ant sp(p), relatively large, black, stinging’; see §5.6.2.

gahi-me(-)mea “large ant-red”; ‘ant sp(p), relatively large, red, with painful sting, coastal dweller’; see §5.6.2.

gahi-ta-Maewo “large ant-from-Maewo”;⁹ ‘ant sp(p), relatively large, stubby with large abdomen, pale-coloured, non-stinging, found in dried branches of breadfruit, in hollow-stemmed leaves (e.g. of pawpaw) and in holes in trees, reputedly from Maewo’; see §5.6.2.

huhu(-)lua (3) “...(-)...”; ‘bee or wasp sp(p), hairy body, large head, painful sting’; see §4.4.3.2.2 and §5.3.

venevene ~ *venvene* ‘wasp sp, mud-dauber wasp, Sphecidae, *Sceliphron* sp, makes nest on house walls’; see §5.3.

⁷ Among the fruit fly species present in Vanuatu David Tau (pers.comm. 1995) notes *Bactrocera trilineola* (the hosts of which include pawpaw, breadfruit, avocado, mango, guava and various citrus); *B. umbrosa* (host is breadfruit only); *B. paraxanthodes* (host is fruit of *Barringtonia edulis* only); *B. quadrisetosa* (host is fruit of *Pometia pinnata* only); *B. minuta* (host is fruit of *Antiaris toxicaria* only); and five other species (*B. anomela*, *B. redunea*, *B. simulata*, *B. garacilis* and *B. curvipennis*) for which the host fruit had not yet been firmly identified.

⁸ Ambae, formerly known by Europeans as Aoba, is the closest island (about 25 kilometers distant) to the north-west of North Pentecost.

⁹ Maewo is the closest island (about seven kilometres distant) to the north of North Pentecost.

4.4.3.2.5 Order: Coleoptera (beetles)

bwilo (1) 'generic for a range of beetles and grasshoppers'; see §4.4.3.1.2 and §5.3.

avua-n-wai "turtle-of-freshwater"; 'water beetle sp(p), Dytiscidae'.

bilage 'tiger beetle sp(p), Cicindelidae'; see §5.3.

bwala-gao "husk (empty)/shell-rope"; 'scarab beetle sp(p), Scarabaeidae, larva leaves a rope-like tunnel where it has eaten taro or yam tuber'; see §5.3.

bwilo-niu "beetle-coconut"; 'rhinoceros beetle sp, Scarabaeidae, *Dryctes rhinoceros*'; see §5.3.

gas-tu-tu "bite-stand-stand"; 'beetle sp(p), eats dry sago-palm roof thatch'; see §5.3.

gutu-n-pamkeni "louse-of-pumpkin"; 'pumpkin beetle sp(p), Chrysomelidae, possibly *Aulacophora hilaris*'.¹⁰

mata-ni-alo "eye-of-sun"; 'longhorn beetle sp(p), Cerambycidae, its wings gleam golden in the sunlight'; see §5.3.

mat-bwaigo "eye-..."; 'possibly stag beetle sp(p), Lucanidae, male has protuberance which forks at end'; see §5.3.

Note also:

avato 'larva of *mata-ni-alo*, whitish, feeds on rotten wood, some varieties are eaten by humans'; see §5.6.1.

avato-bwiña "*avato*-close eyes?"; 'pupa stage of *avato*'; see §5.1.1.

huhu-gai ~ *huhu-ga*(?) "suck-wood"; 'generic for wood-boring beetle larvae, including *avato* in rotting wood, and for wireworms in living timber'; see §5.6.1.

tal(-)bitoni "...(-)..."; 'larvae of various beetle spp, including soil grubs, curl grubs, and the scarab beetle grubs which bore into taro and yam'.

tata-vusi "...-hill"; 'larva of *bilage*, when it rains this larva plugs the entrance to its burrow by humping its back'; see §5.8.2.

4.4.4 Class: Crustacea (crustaceans)

SUPERORDER: PERICARDIA

4.4.4.1 Order: Isopoda (isopods, woodlice, sowbugs)

SUBORDER: ONISCOIDEA (WOODLICE, SOWBUGS)

gal-gal-mwaragi "tempt-tempt-Greenwinged Ground Dove (*Chalcophaps indica sandwichensis*)"; 'woodlouse sp(p), very small, like a small slater, rolls into a ball when touched or when *mwaragi* is close, so that the bird fails to recognise it as food'; see §5.1.2.

¹⁰ Raga *pamkeni* is derived from Bislama *pamkin* (Crowley 1990:177), which in its turn is derived from English *pumpkin*.

4.4.4.2 Order: Amphipoda (*amphipods, scuds, side-swimmers*)

SUBORDER: GAMMARIDEA

gutu-n-one “louse-of-sand”; ‘sand hopper sp(p), Talitridae’; see §5.1.3.

4.4.4.3 Order: Decapoda

SUBORDER: REPTANTIA

4.4.4.3.1 Section: Astacura (*lobsters, freshwater crayfish*)

garote ~ *garote-n-wai* “crayfish-of-freshwater” ~ *ura-n-wai* “lobster of freshwater”; ‘freshwater crayfish sp(p), possibly Parastacidae or Austroastacidae, a gastronomic delight’; see §5.12.3.

4.4.4.3.2 Section: Anomura

FAMILY: COENOBITIDAE (LAND HERMIT CRABS)

gatou (1) ‘generic for coconut crabs and hermit crabs’; see §5.12.3.

davweu (1) ‘generic for coconut crabs’; see §5.12.3.

gatou (2) ‘generic for hermit crabs’; see §5.12.3.

davwe-mata-gabi “coconut crab-eye-fire”; ‘coconut crab sp, *Birgus latro*, brownish-red, lighter in colour than *davweu* (2), eaten by humans’; see §5.12.3.

davweu (2) ‘coconut crab sp, *Birgus latro*, eaten by humans, a highly regarded food’; see §5.12.3.

gatou (3) ‘hermit crab sp(p), the most common of the hermit crabs’; see §5.12.3.

gatou-boe “hermit crab-pig”; ‘hermit crab sp(p), favours larger seashells, especially *arañi* (Turbinidae), has one big claw, lives under rocks’; see §5.12.3.

gatou-ġere-ġere “hermit crab-tail-tail”; ‘hermit crab sp(p), very small, resembles *gatou-inogi*’; see §5.12.3.

gatou-inogi “hermit crab-nest”; ‘hermit crab sp(p), very small, coastal dweller, used as bait, makes nests’; see §5.12.3.

ġalo-gai “go in/on-tree”; ‘hermit crab sp(p), usually goes onto *vaġe* (*Pangium edule*), climbs the tree and sleeps in *rawalu* (*Monstera deliciosa*) or in hole in tree’.

Note also:

davwe-ruruhi “coconut crab-sloughed shell”; ‘coconut crab with new soft body-shell, the crab is best to eat at this stage, which may last for up to two months’.

gai(-)sigo-bwatoa “walking stick-blunt”; ‘an old blunt-clawed coconut crab’.

4.4.4.3.3 Section: Brachyura (*land crabs, marine crabs*)

gave ‘generic for land crabs and marine crabs’.

dui ‘land crab sp(p), about ten centimetres wide, hairy legs, found in damp locations in deep (longer than arm-length) holes in rocks around coast, whitish in colour, eaten by humans all year round’; see §5.12.3.

gave-meto ‘land crab-black’; ‘land crab sp(p), dark-coloured’; see §5.12.3.

gave-n-bwatu-n-bahara ‘land crab-of-base-of-cliff’; ‘land crab sp(p), found around base of cliffs’; see §5.12.3.

gave-rara ‘land crab-Indian Coral Tree (*Erythrina indica*)’; ‘land crab sp(p), poisonous’; see §5.12.3.

gav-hovi ‘land crab-fall down’; ‘land crab sp(p), seeks water in hollows of trees’; see §5.12.3.

gav-soagā ‘land crab-...’; ‘land crab sp(p)’; see §5.12.3.

ga(v)-vwili ‘land crab-...’; ‘land crab sp(p), smallish, up to eight centimetres wide, whitish colouring, sand-dweller’.

hubwe-hubwe ‘...-...’; ‘land crab sp(p)’; see §5.12.3.

mu(-)re(-)rere ‘...(-)boil/froth(?)’; ‘land crab sp(p), small’; see §5.12.3.

mu(-)veve ‘...(-)...’; ‘land crab sp(p), smallish, five to eight centimetres wide, whitish-brown underside and claws, a few hairs on legs, inland dweller’; see §5.12.3.

mu(-)vulvului ‘...(-)lie on side or back with legs drawn in tightly(?)’; ‘land crab sp(p), small’; see §5.12.3.

4.4.5 Class: Arachnida (scorpions, spiders)

4.4.5.1 Order: Scorpiones (scorpions)

bageo-n-tano ‘shark-of-ground’; ‘scorpion sp(p)’; see §5.12.3.

boe-bila-n-tagaro ‘pig-belonging-to-god’; ‘scorpion sp(p)’; see §5.12.3.

4.4.5.2 Order: Araneae (spiders)

tagaga (1) ‘generic for spiders’; see §5.2.1.

mwara-gege (2) ‘...-stand with arms spread out and bent downwards’; ‘spider sp(p), Pholcidae, long-legged’; see §4.4.3.2.3.1.1 and §5.2.

tagaga-año ‘spider-yellow’; ‘spider sp(p), Argiope, large, has yellow markings, makes a sticky yellowish orb web’; see §5.2.1.

tagaga-boe ‘spider-pig’; ‘spider sp(p), large, with large stomach, brown with light-coloured underside’; see §5.2.1.

tagaga-bute ‘spider-jump down’; ‘spider sp(p), has jumping motion’; see §5.2.1.

tagaga-dule ‘spider-hang’; ‘spider sp(p), small, hangs down on its web thread’; see §5.2.1.

tagaga-n-imwa ‘spider-of-house’; ‘spider sp(p), makes its web in high corners of house interiors’; see §5.2.1.

Note also:

bwiri-vanua “thatch ridge pole-(of) village/island” (?); ‘large orb web of spider sp(p)’.
tagaga (2) ‘spider web’.

4.4.5.3 Order: Acari (mites)

ga-gasi “bite-bite” ~ *lalañan-gutu* “various different kinds of (?)-louse”, ‘itch mite sp(p)’.

4.5 Phylum: Chordata (chordates)

SUBPHYLUM: VERTEBRATA (VERTEBRATES)

4.5.1 Class: Reptilia (reptiles)

4.5.1.1 Order: Chelonia = Testudines (tortoises, terrapins, turtles)

FAMILY: CHELONIDAE (MARINE TURTLES)¹¹

avua ‘generic for marine turtles’; see §5.10.

avu-vanua “turtle-island”; ‘turtle sp, Hawksbill Turtle, *Eretmochelys imbricata*, carapace up to about 85 centimetres long, hooked beak, eggs are laid by day or night on beaches along sheltered bays, eaten by humans’; see §5.10.

avu-vatu “turtle-stone”; ‘turtle sp, Green Turtle, *Chelonia mydas*, weighs up to between 90 and 125 kilograms, carapace up to 120 centimetres long, eggs are laid at night on isolated beaches and are buried in sand, eaten by humans, in danger of general extinction through over-harvesting and indiscriminate drift-netting’; see §5.10.

4.5.1.2 Order: Loricata = Crocodylia (crocodylians)

FAMILY: CROCODYLIDAE (CROCODILES)¹²

via “giant taro”; ‘crocodile sp(p), probably Estuarine or Saltwater Crocodile, *Crocodylus porosus*, a very occasional visitor to North Pentecost, probably from the estuarine waters of Vanua Lava in the Banks Islands,¹³ named *via* reputedly because of its resemblance when in the water to the tuber of the giant taro, *Alocasia macrorrhiza*, called *via*’; see §5.11.3.¹⁴

¹¹ Marine turtles are included in this paper because of the terrestrial connection furnished by their egg-laying practices and the often hazardous journey of the newly-hatched turtles across the beach to the sea.

¹² Crocodiles are a borderline case for inclusion in this paper. They do spend time on land, but, as occasional visitors only, they have not been known, in recent memory at least, to have done so on North Pentecost.

¹³ Vanua Lava, one of the two larger islands in the Banks group, is about 180 kilometres north-north-west of North Pentecost.

¹⁴ Raga *via* ‘crocodile sp(p)’ may be derived from Mota (the language of one of the Banks Islands closest to Vanua Lava) *via* ‘crocodile’, ‘the giant caladium’ and, by metaphorical extension to human behaviour, ‘a voracious eater’ (Codrington and Palmer 1896:262). Added probability is given to the Mota borrowing hypothesis by the fact that contact between the Raga and Mota languages was greatly increased by the use of Mota as the lingua franca of the Melanesian Mission’s operations in the Solomon Islands and northern and central Vanuatu from the 1870s to the 1950s.

4.5.1.3 Order: Squamata (*lizards, snakes*)

4.5.1.3.1 Suborder: Lacertilia (*lizards*)

FAMILY: GEKKONIDAE (GECKOS); SCINCIDAE (SKINKS)

buaso 'lizard sp(p), probably Black Skink, *Emoia nigra*, up to 20 centimetres long, very black on top and yellow underneath, lives under old rotten trees or in holes in rocks, sometimes comes into houses'; see §5.11.2.

gala 'lizard sp(p), probably Green Skink, *Emoia sanfordi*, up to 30 centimetres long, green, tree dweller, hunted at night, eaten by humans, but to a decreasing extent'; see §5.11.1.

holi 'lizard sp(p), about ten centimetres long, golden-coloured (?), found in grass and small bushes, does not climb trees, comes into houses'; see §5.11.2.

magobi 'lizard-sp(p), Gekkonidae, about twelve centimetres long, found on trees, eaten by humans'; see §5.11.1.

magobi-mutai "lizard-important(?)"; 'lizard sp(p), Gekkonidae, up to 15 centimetres long, eaten by humans'; see §5.11.1

magobi-tagaro "lizard-god"; 'lizard sp(p), Gekkonidae, between ten and twelve centimetres long, light-coloured, house-dwelling'; see §5.11.1.

oro(-)gai "...(-)tree(?)"; 'lizard sp(p), brown'; see §5.11.1.

tara(-)bote "...(-)..."; 'lizard sp(p), between ten and twelve centimetres long, dark-coloured, found under rotten logs'; see §5.11.2.

Within the suborder Lacertilia, Medway and Marshall (460) list four Gekkonidae species and ten Scincidae species, including *Emoia nigra* and *Emoia sanfordi*, as collected or recorded for one or more of the central and northern islands of Efate, Malekula and Espiritu Santo.

4.5.1.3.2 Suborder: Ophidia = Serpentes (*snakes*)

tali(-)venue "...(-)..."; 'snake sp(p), long, thin, white, not often seen'; see §5.11.2.

tali(-)venue-n-malaña "...(-)...-of-cave"; 'snake sp(p), cave-dwelling'; see §5.11.2.

tel(-)tele "...(-)..."; 'snake sp(p), up to 60 centimetres long and up to five centimetres in diameter, its markings are yellow, black and brown'; see §5.11.2.

Within the suborder Ophidia, Medway and Marshall (460) list two species: the Flowerpot Snake, *Typhlops braminus*, which was collected only on Efate, and the Pacific Boa, *Candoia bibroni*, which was collected on Espiritu Santo and reported for Malekula and Efate.

4.5.2 Class: Mammalia (*mammals*)

4.5.2.1 Order: Chiroptera (*bats*)

bwaratu 'generic for fruit bats, and possibly for all bats'; see §5.3.

4.5.2.1.1 Suborder: Megachiroptera (fruit-sucking bats)

FAMILY: PTEROPODIDAE (FRUIT BATS)

bwara-gogo “flying fox-...”; ‘fruit bat sp, Vanuatu Flying-fox (F247-249) ~ White Flying-fox (M&M453), *Pteropus anetianus*, “a very variable species of medium-sized flying-fox, usually yellowish in colouration” (F248), eaten by humans’; see §5.3.

bwarat-vavine “flying fox-woman”; ‘female of fruit bat sp, Pacific Flying-fox (F294-296) ~ Black Flying-fox (M&M453), *Pteropus tonganus geddiei* (F295), “a medium-sized to large flying-fox with a black back, bright yellow mantle, and a long muzzle” (F295), eaten by humans’; see also *man-gogona* below, and see §5.3.

gere-gere-ihī (2) “tail-tail-banana”; ‘fruit bat sp, Fijian Blossom-bat (F218-220) ~ Long-tailed fruit bat (M&M453), *Notopteris macdonaldi*, “small, khaki-coloured bats with elongate muzzles, a very long free tail, and wings which meet in the midline of the back” (F219), found around banana trees, has a rat-like tail’; see §4.4.3.1.4 and §5.3.

man-gogona “bird-restricted (as a man is after killing pigs)”; ‘male of fruit bat sp, Pacific Flying-fox, eaten by humans’; see also *bwarat-vavine* above, and see §5.3.

Within the family Pteropodidae, Medway and Marshall (453) list the above three zoological taxa as collected or recorded for Efate, Malekula and Espiritu Santo. Flannery notes these three Pteropodidae plus *Pteropus fundatus* (F258), found only in the Banks Islands, as occurring in the central and northern islands of Vanuatu, with only two of them, *P. anetianus* and *P. tonganus geddiei*, as occurring on Pentecost. There is no doubt, however, in the light of local knowledge, that *N. macdonaldi* is present on North Pentecost.

4.5.2.1.2 Suborder: Microchiroptera (insectivorous bats)

gaba(-)gaba “flap wings repeatedly without actually flying” (?); ‘insectivorous bat sp(p)’; see §5.3.

sisi-bwaratu “tie knot(?)-bat”; ‘insectivorous bat sp(p), small, cave-dwelling, flies at dusk’; see §5.3.

Within the suborder Microchiroptera, Medway and Marshall (453) list eight species as collected or recorded for one or more of the central and northern islands of Efate, Malekula and Espiritu Santo. Flannery (336–337, 342–343, 373–376, 382–383, 403–404) notes seven Microchiroptera species as present in the central and northern islands of Vanuatu, but does not note any of them as occurring on Pentecost. In the light of local knowledge, further zoological investigation of the insectivorous bats of North Pentecost is warranted.

4.5.2.2 Order: Rodentia (rodents)

SUBORDER: MYOMORPHA (RATS, MICE, VOLES)

FAMILY: MURIDAE

SUBFAMILY: MURINAE (OLD WORLD RATS AND MICE)

garivi 'rat sp, Pacific Rat (F50) ~ Polynesian Rat (M&M453), *Rattus exulans*, an early introduction to Vanuatu by speakers of Austronesian languages, formerly eaten by humans'.

laboa ~ *bwat-laboa* "true/basic(?)-..."; '*R. exulans* variant, relatively large, formerly eaten by humans'.

lede ~ *bwat-lede* "true/basic(?)-..."; '*R. exulans* variant, has relatively long tail, formerly eaten by humans'.

Within the subfamily Murinae, Medway and Marshall (453) list four species, including *R. exulans* and the recent introductions *R. rattus*, *R. norvegicus* and *Mus musculus*, as collected or recorded for one or more of the central and northern islands of Efate, Malekula and Espiritu Santo. Flannery (50) notes *R. exulans* as having "arrived in Melanesia around 3500 years ago", *R. rattus* as being present in "grossly disturbed habitats in eastern Melanesia", *R. norvegicus* as being present in major towns in the south-west Pacific region, and *M. musculus* as being "Widespread in grassland and towns" throughout the region.

4.5.2.3 Order: Carnivora

SUBORDER: FISSIPEDA (DOGS, CATS, WEASELS, BEARS)

4.5.2.3.1 Family: Canidae (dogs)

vwiriu 'dog sp, *Canis familiaris* (F49), an early introduction to Vanuatu by speakers of Austronesian languages, primarily domesticated, but there may be a few ferals'.¹⁵

4.5.2.3.2 Family: Felidae (cats)

busi 'cat sp, *Felis catus* (F49), a recent introduction, primarily domesticated, but there may be a few ferals'.¹⁶

4.5.2.4 Order: Artiodactyla

4.5.2.4.1 Suborder: Suiformes

FAMILY: SUIDAE (WILD PIGS)

boe 'pig sp(p), *Sus scrofa vittatus* possibly crossed with *Sus celebensis* (F49), long-headed,¹⁷ an early introduction to Vanuatu by speakers of Austronesian languages,

¹⁵ Raga *vwiriu* is used primarily with reference to the descendants of the early introduction, but when the occasion arises it can be used with reference to crossbreeds, and more recent imports.

¹⁶ Raga *busi* 'cat sp' is derived from Bislama *busi* 'cat' (Crowley 1990:65), which in its turn is derived from English *pus.sy*.

¹⁷ The contrast between the long-headed pigs descended from the early introduction, and the short-headed pigs introduced by Europeans is reflected in Bislama *pig~pigpig* '*Sus scrota* (sic)' (Crowley 1990:181) and *sofes* 'introduced pig (as against local pig)' (Crowley 1990:223).

most are domesticated, raised for ceremonial killing in grade-taking ceremonies and also as food, but there are some ferals'.¹⁸

4.5.2.4.2 Suborder: Ruminantia

FAMILY: BOVIDAE (WILD CATTLE)

buluk ~ *buluki* 'cattle sp, *Bos taurus* (F49), a recent introduction, domesticated, used to keep down undergrowth in coconut plantations, and also as food'.¹⁹

4.6 Comment

The main body of §4 has demonstrated something of the range and richness of Raga vocabulary for terrestrial invertebrates, reptiles and mammals. As far as associating this vocabulary with the etic categories of formal zoological classification is concerned, however, it has proved possible, in the main, to link the Raga taxa only with such higher levels of zoological classification as phylum, subphylum, class, subclass, superorder, order, suborder and family. The number of cases in which glossing in terms of zoological species has been possible is regrettably small.

This kind of etic glossing needs to have the degree of specificity provided by linking the target taxa, in this instance the Raga vocabulary, decisively with at least the species level of the zoological taxonomy. It is not possible to achieve this by having Raga experts working on North Pentecost with a linguist who is not also a zoologist, nor can it be achieved by showing Raga experts a museum display, when the best that can be said in most cases is that a given specimen is or is not more or less like the on-the-ground referent of a given Raga taxon.

To obtain the required degree of precision in the etic zoological glossing of Raga names for terrestrial invertebrates, reptiles and mammals, zoological specialists, such as entomologists and herpetologists, conversant with the fauna of the south-west Pacific region, will need to work in North Pentecost in association with Raga experts in faunal lore and a linguist conversant with Raga.

5 A provisional emic grouping of the Raga taxa

When considering the Raga vocabulary for *manu* 'birds' (Walsh and Leona 1996), it was possible to use a well-defined emic subclassification, located between *manu* and its component terminal taxa, as the framework for presenting the *manu* vocabulary. In Raga terms, however, terrestrial invertebrates, reptiles and mammals are not grouped into labelled homogenous life-form classes comparable with *manu* 'birds' or *ige* 'fish'.

¹⁸ Pigs have great significance in the Raga culture because of the crucial part their being ceremonially killed plays in the grade-taking process by which men acquire political power and status. There is in consequence a rich and extensive Raga vocabulary relating to pigs in their various stages of growth and tusk development.

¹⁹ Raga *buluk*~*buluki* 'cattle sp' is derived from Bislama *buluk* 'cattle' (Crowley 1990:64), which in its turn is derived from English *bullock*.

On becoming acquainted with the hierarchic classification used by zoologists for terrestrial fauna, a classification which reflects a theory of the origins and evolution of life forms, Leona gave the matter some thought and produced his own unique perception of the grouping of the terrestrial fauna of North Pentecost.

When, at the presentation of the initial version of this paper at the Second International Conference on Oceanic Linguistics, Leona was asked by Andrew Pawley what currency his grouping might have among Raga speakers, his reply was that while most Raga people grouped *manu* in the way described in Walsh and Leona (1996), not many of them grouped the fauna considered in this paper to any great extent, if at all. It was only people like himself who, because of their linguistic work and their involvement with fieldwork for the Vanuatu Cultural Centre, had any real need to consider higher-level grouping and subgrouping of terrestrial fauna.

What follows are his provisional and personal emic groupings, which do not necessarily have overall hierarchic implications.²⁰ These groupings are covert categories, which do not have specific unitary labels but which can be, and are, referred to by means of the descriptive constructions listed below as section and subsection headings.

These descriptive constructions have the shape + head ± modifier, with head being + *ginau* 'things' ± verb, and modifier being + locational phrase.

For listing purposes the constructions are here notionally grouped in terms of their heads, and then subgrouped in terms of their modifiers. The order of listing for groups, and for subgroups within a given group, is alphabetical.

Raga taxa within a given grouping are listed alphabetically. Each taxon has a short gloss and a cross-reference to the appropriate listing in §4. This cross-referencing provides ready access to the full glossing details for a given taxon.

5.1 *Ginau...* 'things...'

5.1.1 *Ginau ata a-lolo-n gai* 'things belonging to within wood'

avato-bwiña 'pupa of longhorn beetle sp(p)'; see §4.4.3.2.5.

5.1.2 *Ginau ata la tano* 'things belonging to at/on ground'

gal-gal-mwaragi 'woodlouse sp(p)'; see §4.4.4.1.

5.1.3 *Ginau ata lol one* 'things belonging to in/on sand'

gutu-n-one 'sand hopper sp(p)'; see §4.4.4.2.

5.2 *Ginau dule (...)* 'things (that) hang (...)'

mwara-gege (2) 'spider sp(p)'; see §4.4.5.2.

²⁰ Pond's research supports a view that oceanic classification of terrestrial arthropods is phenetic, ecological and in general non-hierarchical (1994:115).

5.2.1 *Ginau dule ata la tagaga* ‘things (that) hang belonging to at/on spider webs’

tagaga (1) ‘generic for spiders’; see §4.4.5.2.

tagaga-año ‘spider sp(p)’; see §4.4.5.2.

tagaga-boe ‘spider sp(p)’; see §4.4.5.2.

tagaga-bute ‘spider sp(p)’; see §4.4.5.2.

tagaga-dule ‘spider sp(p)’; see §4.4.5.2.

tagaga-n-imwa ‘spider sp(p)’; see §4.4.5.2.

5.3 *Ginau gaga* (...) ‘things (that) fly (...)’

bebe ‘generic for butterflies and moths’; see §4.4.3.2.2.

bebe-añoga ‘butterfly/moth sp(p)’; see §4.4.3.2.2.

bebe-bwaratu ‘moth sp(p)’; see §4.4.3.2.2.

bebe-ḡal-ḡalana ‘butterfly/moth sp(p)’; see §4.4.3.2.2.

bebe-huhu ‘moth sp(p)’; see §4.4.3.2.2.

bebe-tibwa(-)tibwa ‘butterfly sp(p)’; see §4.4.3.2.2.

bebe-ure ‘hawk moth sp(p)’; see §4.4.3.2.2.

bilage ‘tiger beetle sp(p)’; see §4.4.3.2.5.

bwala-gao ‘scarab beetle sp(p)’; see §4.4.3.2.5.

bwara-gogo ‘fruit bat sp’; see §4.5.2.1.1

bwaratu ‘generic for fruit bats and possibly all bats’; see §4.5.2.1.

bwarat-vavine ‘female of fruit bat sp’; see §4.5.2.1.1.

bwil-bwero-vat-mwabwe ‘grasshopper sp(p)’; see §4.4.3.1.2.

bwil-mara(-)gaba ‘shorthorned grasshopper sp(p)’; see §4.4.3.1.2.

bwilo (1) ‘generic for a range of grasshoppers and beetles’; see §4.4.3.1.2 and §4.4.3.2.5.

bwilo (2) ‘grasshopper sp(p)’; see §4.4.3.1.2.

bwilo-niu ‘rhinoceros beetle sp(p)’; see §4.4.3.2.5.

bwilo-n-mwane ‘grasshopper sp(p)’; see §4.4.3.1.2.

bwilo-n-rau-gai ‘grasshopper sp(p)’; see §4.4.3.1.2.

bwil-rau-mwabwe ‘longhorned grasshopper sp(p)’; see §4.4.3.1.2.

gaba(-)gaba ‘insectivorous bat sp(p)’; see §4.5.2.1.2.

gagalu ‘tree cricket sp(p)’; see §4.4.3.1.2.

gas-tu-tu ‘beetle sp(p)’; see §4.4.3.2.5.

ḡere-ḡere-ih (2) ‘fruit bat sp’; see §4.5.2.1.1

huhu(-)lua (3) ‘bee or wasp sp(p)’; see §4.4.3.2.4.

lañ-lua ~ laño-lua ‘blowfly sp(p)’; see §4.4.3.2.3.2.

laño (1) ‘generic for flies’; see §4.4.3.2.3.2.

laño (2) ‘housefly sp(p)’; see §4.4.3.2.3.2.

laño-n-tae ‘fleshfly sp(p)’; see §4.4.3.2.3.2.
laño-n-vwai-gai ‘fruit fly spp’; see §4.4.3.2.3.2.
man-gogona ‘male of fruit bat sp’; see §4.5.2.1.1.
mara-nono ‘ferment or vinegar fly sp(p)’; see §4.4.3.2.3.2.
mata-ni-alo ~ alo ‘longhorn beetle sp(p)’; see §4.4.3.2.5.
mat-bwaigo ‘possibly stag beetle sp(p)’; see §4.4.3.2.5.
mwarā-gege (1) ‘cranefly sp(p)’; see §4.4.3.2.3.1.1.
nam-tutui ~ namu-tutui ‘mosquito sp(p)’; see §4.4.3.2.3.1.2.
namu (1) ‘generic for mosquitoes’; see §4.4.3.2.3.1.2.
namu (2) ‘mosquito sp(p)’; see §4.4.3.2.3.1.2.
namu-ata-boñi ~ namu-n-ute-boñi ‘mosquito sp(p)’; see §4.4.3.2.3.1.2.
namu-borogai ‘mosquito sp(p)’; see §4.4.3.2.3.1.2.
namu-mea ‘mosquito filled with blood’; see §4.4.3.2.3.1.2.
ratahi-n-namu ‘cranefly sp(p)’; see §4.4.3.2.3.1.1.
saḡovi-ravi ‘midge spp’; §4.4.3.2.3.1.3.
sisi-bwaratu ‘insectivorous bat sp(p)’; see §4.5.2.1.2.
sogorea ‘damselfly sp(p) and dragonfly sp(p)’; see §4.4.3.1.1.
tatau(-)bei ‘grasshopper sp(p)’; see §4.4.3.1.2.
venevēne ~ venvene ‘wasp sp’; see §4.4.3.2.4.

5.3.1 *Ginau gaga ata la gai* ‘things (that) fly belonging to at/on trees’

biña ‘cicada sp(p)’; see §4.4.3.1.9.2.

5.3.2 *Ginau gaga ata la rau* ‘things (that) fly belonging to at/on leaves’

tabwa-tea ‘shield bug sp(p)’; see §4.4.3.1.9.1.

5.4 *Ginau ga-gasi ata lol ilu* ‘things (that) bite belonging to in hair and feathers’

arañ-dalisi ‘sucking louse sp(p)’; see §4.4.3.1.8.
gutu (1) ‘generic for biting lice and sucking lice’; see §4.4.3.1.7 and §4.4.3.1.8.
gutu (2) ‘sucking louse sp’; see §4.4.3.1.8.
gutu-boe ‘sucking louse sp(p)’; see §4.4.3.1.8.
gutu-n-buluki ~ gutu-n-buluk ‘sucking louse sp(p)’; see §4.4.3.1.8.
gutu-n-bwaratu ‘sucking louse sp(p)’; see §4.4.3.1.8.
gutu-n-manu ‘biting louse sp(p)’; see §4.4.3.1.7.

- gutu-n-toa* 'biting louse sp(p)'; see §4.4.3.1.7.
gut-visi 'sucking louse sp(p)'; see §4.4.3.1.8.
sususu 'possibly sucking louse sp(p)'; see §4.4.3.1.8.

5.5 *Ginau gan-gan gai* 'things (that) eat (and make holes in) live trees and dead timber'

- mwalalae* 'termite sp(p)'; see §4.4.3.1.6.
raerae 'termite sp(p)'; see §4.4.3.1.6.

5.6 *Ginau lago...* 'things (that) walk...'

5.6.1 *Ginau lago ata la rau-gai* 'things (that) walk belonging to at/on tree leaves'

- avato* 'larva of longhorn beetle sp(p)'; see §4.4.3.2.5.
huhu-gai ~ *huhu-ga* (?) 'generic for wood-boring beetle larvae'; see §4.4.3.2.5.
tarou (1) 'generic for caterpillars of butterflies and moths'; see §4.4.3.2.2.

5.6.2 *Ginau lago ata la tano* 'things (that) walk belonging to at/on ground'

- butubut-ata-Ambae* 'ant sp(p)'; see §4.4.3.2.4.
butubut-maita 'ant sp(p)'; see §4.4.3.2.4.
butubut-me(-)mea 'ant sp(p)'; see §4.4.3.2.4.
butubut-meto 'ant sp(p)'; see §4.4.3.2.4.
butubutu (1) 'generic for smaller ants'; see §4.4.3.2.4.
butubutu (2) 'ant sp(p)'; see §4.4.3.2.4.
butubutu-n-suka 'ant sp(p)'; see §4.4.3.2.4.
gahi (1) 'generic for larger ants'; see §4.4.3.2.4.
gahi (2) 'ant sp(p)'; see §4.4.3.2.4.
gahi-me(-)mea 'ant sp(p)'; see §4.4.3.2.4.
gahi-ta-Maewo 'ant sp(p)'; see §4.4.3.2.4.

5.6.3 *Ginau lago lol tano* 'things (that) walk on ground'

- bwalage-vudolua* 'centipede sp(p)'; see §4.4.2.
bwan-sere(-)sere 'centipede sp(p)'; see §4.4.2.
kuruket 'millipede sp(p)'; see §4.4.1.
tarou (2) 'millipede sp(p)'; see §4.4.1.
weli 'centipede sp(p)'; see §4.4.2.

5.7 *Ginau rabu ata lol tano ñala(-)ñala* ‘things (that) are alive belonging to dry-and-dusty ground’

sibwa-taniavu ‘larva of ant lion sp(p)’; see §4.4.3.2.1.

5.8 *Ginau rabu-ribu...* ‘things (that) are alive-and-moving..’

5.8.1 *Ginau rabu-ribu ata lol atatu* ‘things (that) are alive-and-moving belonging to in(side) people’

gan-lolo ‘intestinal worm sp(p)’; see §4.1.

silosi (l) ‘generic for intestinal worms’; see §4.1.

siñ(-)siñ-gai(-)gui ‘intestinal worm sp(p)’; see §4.1.

5.8.2 *Ginau rabu-ribu lol tano* ‘things (that) are alive-and-moving in ground’

rimwa ‘leech sp(p)’; see §4.3.2.

silosi (2) ‘generic for earthworms’; see §4.3.1.

silosi-boe ‘earthworm sp(p)’; see §4.3.1.

silosi-n-tano ‘earthworm sp(p)’; see §4.3.1.

tata-vusi ‘larva of tiger beetle sp(p)’; see §4.4.3.2.5.

5.8.3 *Ginau rabu-ribu lol ginau boni* ‘things (that) are alive-and-moving in/on things (that are) foul-smelling’

ulehi ‘maggot’; see §4.4.3.2.3.2.

5.9 *Ginau ribu...* ‘things (that) move...’

5.9.1 *Ginau ribu ata la rau-n gai* ‘things (that) move belonging to at/on leaves of trees’

bora ‘land snail sp(p)’; see §4.2.

bora-vudolua ‘land snail sp(p)’; see §4.2.

bwala-logu ‘land snail sp(p)’; see §4.2.

bwala-logu-ata-Afrika ‘land snail sp’; see §4.2.

5.9.2 *Ginau ribu ata lol tano* ‘things (that) move belonging to on ground’

logu ~ gina-gan-atmate ~ gin-gan-atmate ‘land slug sp(p)’; see §4.2.

taiv-bila-n-borogai ‘land snail sp(p)’; see §4.2.

5.10 *Ginau rovo ata lol tabi* ‘things (that) run belonging to in/on sea’

avua ‘generic for marine turtles’; see §4.5.1.1.

avu-vanua ‘turtle sp’; see §4.5.1.1.

avu-vatu ‘turtle sp’; see §4.5.1.1.

5.11 *Ginau sirava...* ‘things (that) slither...’

5.11.1 *Ginau sirava ata la gai* ‘things (that) slither belonging to at/in trees’

gala ‘lizard sp(p)’; see §4.5.1.3.1.

magobi ‘lizard sp(p)’; see §4.5.1.3.1.

magobi-mutai ‘lizard sp(p)’; see §4.5.1.3.1.

magobi-tagaro ‘lizard sp(p)’; see §4.5.1.3.1.

oro(-)gai ‘lizard sp(p)’; see §4.5.1.3.1.

5.11.2 *Ginau sirava ata lol tano* ‘things (that) slither belonging to on ground’

buaso ‘lizard sp(p)’; see §4.5.1.3.1.

holi ‘lizard sp(p)’; see §4.5.1.3.1.

tali(-)venue ‘snake sp(p)’; see §4.5.1.3.2.

tali(-)venue-n-malaña ‘snake sp(p)’; see §4.5.1.3.2.

tara(-)bote ‘lizard sp(p)’; see §4.5.1.3.1.

tel(-)tele ‘snake sp(p)’; see §4.5.1.3.2.

5.11.3 *Ginau sirava ata lol tano sa lol wai* ‘things (that) slither belonging to on ground or on/in water’

via ‘crocodile sp(p)’; see §4.5.1.2.

5.12 *Ginau tağa...* ‘things (that) crawl...’

5.12.1 *Ginau tağa i gaga ata la rara-n gai* ‘things (that) crawl and fly belonging to at/on branches of trees’

bei(-)gai ‘stick insect sp(p)’; see §4.4.3.1.3.

me-mere-hi-mata ‘praying mantid sp(p)’; see §4.4.3.1.5.2.

tağalu (1) ‘generic for stick insects and mantids’; see §4.4.3.1.3 and §4.4.3.1.5.2.

tağalu (2) ‘female of stick insect sp(p)’; see §4.4.3.1.3.

tama-n-tağalu ‘male of stick insect sp(p)’; see §4.4.3.1.3.

5.12.2 *Ginau tağa la ġere-n ibi 'things (that) crawl at/on tail of banana'*

ġere-ġere-n-ihī (1) 'earwig sp'; see §4.4.3.1.4.

5.12.3 *Ginau tağa lol tano 'things (that) crawl on ground'*

bageo-n-tano 'scorpion sp(p)'; see §4.4.5.1.

boe-bila-n-tagaro 'scorpion sp(p)'; see §4.4.5.1.

davwe-mata-gabi 'coconut crab sp'; see §4.4.4.3.2.

davweu (1) 'generic for coconut crabs'; see §4.4.4.3.2.

davweu (2) 'coconut crab sp'; see §4.4.4.3.2.

dui 'land crab sp(p)'; see §4.4.4.3.3.

garote ~ garote-n-wai ~ ura-n-wai 'freshwater crayfish sp(p)'; see §4.4.4.3.1.

gatou (1) 'generic for coconut crabs and hermit crabs'; see §4.4.4.3.2.

gatou (2) 'generic for hermit crabs'; see §4.4.4.3.2.

gatou (3) 'hermit crab sp(p)'; see §4.4.4.3.2.

gatou-boe 'hermit crab sp(p)'; see §4.4.4.3.2.

gatou-ġere-ġere 'hermit crab sp(p)'; see §4.4.4.3.2.

gatou-inogi 'hermit crab sp(p)'; see §4.4.4.3.2.

gave 'generic for land crabs and marine crabs'; see §4.4.4.3.3.

gave-meto 'land crab sp(p)'; see §4.4.4.3.3.

gave-n-bwatu-n-bahara 'land crab sp(p)'; see §4.4.4.3.3.

gave-rara 'land crab sp(p)'; see §4.4.4.3.3.

gav-hovi 'land crab sp(p)'; see §4.4.4.3.3.

gav-soağa 'land crab sp(p)'; see §4.4.4.3.3.

ga(v)-vwili 'land crab sp(p)'; see §4.4.4.3.3.

ġalo-gai 'hermit crab sp(p)'; see §4.4.4.3.2.

hubwe-hubwe 'land crab sp(p)'; see §4.4.4.3.3.

mu(-)re(-)rere 'land crab sp(p)'; see §4.4.4.3.3.

mu(-)veve 'land crab sp(p)'; see §4.4.4.3.3.

mu(-)vulvului 'land crab sp(p)'; see §4.4.4.3.3.

5.13 *Ginau visiri ata la rau-n bweta 'things (that) hop belonging to at/on leaf of taro'*

visi(-)ribi 'taro plant hopper sp(p)'; see §4.4.3.1.9.2.

5.14 Comment

The emic grouping that has been presented in §5.1 to §5.13 above does not make any claim to being prescriptive or definitive. It has demonstrated the feasibility of productive grouping within a considerable body of Raga taxa for terrestrial invertebrates, reptiles and mammals, using primarily the parameters of characteristic or distinguishing action, and of characteristic location of that action. It is an individual, provisional and exploratory statement, which is open to refinement, revision and expansion.

6 Coda

Two projects now lie ahead of the authors. One is to persuade governments and other funding bodies of the scientific and educational significance of a joint field project, so that the North Pentecost fauna can be comprehensively surveyed, and Raga knowledge of it fully recorded. The second is to bring together Raga nature history experts and our comparative knowledge of Austronesian naming, in an attempt to decode the meanings of the Raga fauna names and to discover what principles of classification underlie them.

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11 *Postmodification and the structure of relative in Nêlêmwa and other Kanak languages of New Caledonia*

ISABELLE BRIL

1 Introduction

There are no relative pronouns in Kanak languages. What most commonly functions as relativisers are deictic or anaphoric determiners, or forms derived from definite or indefinite articles (as in Cemuhî, Rivierre:1980). This paper will concentrate on the construction of relative clauses and postmodification in Nêlêmwa,¹ with some comparative insights into a few other languages of New Caledonia.

In Nêlêmwa, all arguments and adjuncts may be relativised. Relative clauses are post-head relatives as is generally the case in verb-initial languages. This is consistent with the general pattern of determination which is left-headed, the determined term is followed by the determiner. There are no relative markers either in Nêlêmwa. The two main relative clause forming strategies make use of different types of linkers: *xe*, as in (1), or a post-head deictic or anaphoric determiner, as in (2) and (3). The choice of one of these two types depends on whether the relative determination is identifying or constitutes backgrounded determination.

(1) The connector *xe* is used when the determination is identifying as in (1), i.e. when it is first mentioned:

¹ Nêlêmwa (Bril 1994) is one of the 28 Kanak languages of New Caledonia, spoken in the far-north (around Poum and the neighbouring islands), it is an Oceanic language of the Austronesian family.

- (1) *Na fhe pwaxi-n xe i khîlû.*
 1SG bring child-POSS.3SG CONN 3SG be.ill
 'I am bringing his child, who is ill.'²

This may also be translated as a topicalisation:
 'I am bringing his child, he is ill.'

The morpheme *xe* is associated with realis tense-aspect markers and declarative sentences, it may commute with the virtual/irrealis marker *o* (see §6).

(2) A posthead deictic or anaphoric marker is used when the determination constitutes backgrounded, already shared, preconstructed information, or when it is immediately recoverable deictically. It is postposed to the head and marked for number concord with it.

– Deictic marker:

- (2) *Na fhe pwaxi-n hleny khîlû dame.*
 1SG bring child-POSS.3SG this.DEICT be.ill up.here
 'I am bringing here this child of his who is ill.'

– Anaphoric marker:

- (3) *Na fhe pwaxi-n bai khîlû dame.*
 1SG bring child-POSS.3SG that.ANAPH be.ill up.here
 'I've brought here that child of his who is ill.'

Backgrounded determination as in (2) and (3) requires a prior stage when the information is first mentioned and predicated, as in (1). In all cases, such markers are obligatory; they structure the relation between the head and the relative clause. This position cannot be empty.

2 *xe* as a multifunctional morpheme

Apart from its function as a relativiser, *xe* is also the left-dislocation/topic marker, and the complementiser of some verbs. All these functions of *xe* share a common denominator, *xe* introduces some form of postmodification, whether verbal complementation or nominal postmodification, which constitutes new information.

2

Abbreviations:

AGT	agent	DIR	directional	PREP	preposition
ANAPH	anaphoric	DUR	durative	PRES	present tense
ART	article	EXCL	exclusive	PRESENT	presentative
ASS	assertive	FUT	future	RECIP	reciprocal
ASSOC	associative	INACC	inaccusative object	REL	relator
ATTRIB	attributive	INDEP	independent pronoun	SM	subject marker
CAUS	causative	LOC	locative	STAT	stative
CLASS	classifier	NEG	negation	TR	transitive form
COLL	collective	NEG.PRED	negative predicate	VIRT	virtual
COMIT	comitative	NOM	nominalising prefix	3SG	third person singular
CONN	connector	PASS	passive	3DU	third person dual
CONT	continuous	PERF	perfective	3PL	third person plural
DEICT	deictic	POSS	possessive pronoun		

2.1 *xe* as the topic marker

As the topic marker, *xe* has discursive function and indicates the fronting of an argument or adjunct in topic position, thus reversing the neutral order (predicate/argument). What is to the left of *xe* is topical, what comes to its right is predicative.

2.1.1 *Verbal predication*

The unmarked order of Nêlêmwa is predicate-initial, followed by nominal arguments as in sentence (4); left-dislocation fronts any of the nominal arguments which are then marked by *xe* as in (5).

– Unmarked order:

- (4) *I axi-e a thaamwa ena.*
 3SG see.TR-3SG AGT woman this.DEICT
 ‘This woman sees him.’

The first argument *thaamwa* is marked as the agent by the agent morpheme *a*.

– Fronted nominal agent, marked order:

- (5) *Thaamwa ena xe i axi-e.*
 woman this.DEICT CONN 3SG see.TR-3SG
 ‘This woman, she sees him.’

When the agent is fronted, the agent marker disappears.

The morpheme *xe* signals a fronted topic which is then predicated on and determined. In Nêlêmwa, the fronted element may have various degrees of referential determinacy: it may be generic, referentially indefinite, or it may be referentially definite, as in (5).

The topic may be a whole proposition rather than a noun as in the following:

- (6) *I khabwe xe io i diya.*
 3SG say CONN FUT 3SG do
 ‘He said it, (so) he’ll do it.’ OR: ‘He said that he’ll do it.’

2.1.2 *Non-verbal predication*

The morpheme *xe* also marks a fronted argument in non-verbal predication.

– Neutral order of the predication: predicate/argument:

- (7) *Makue holeny.*
 taro this.DEICT
 ‘This is taro.’

– Marked order: the argument is fronted (argument *xe* predicate):

- (8) *Holeny xe makue.*
 this.DEICT CONN taro
 ‘This, it is taro.’

The fronted topic (*holeny*) is identified by the predicate (the noun *makue*).

2.2 *xe* as a complementiser or connector

Xe also introduces the complements of verbs such as *axe* 'see' or *kaxaak* 'be sure' and sometimes complements of the verb *khawwe* 'say' in reported speech (as in 'he says that...'). It is associated with declarative clauses.

- (9)a. *I axe xe xu jeuk tan.*
 3SG see CONN PERF be.near night
 'He sees that the night is coming.'
- b. *Na kaxaak xe na â Pum.*
 1SG be.sure CONN 1SG go Poum
 'I'm sure to go to Poum.'

It is also part of subordinating locutions. This function is actually derived from that of topic marker:

- (10)a. *Hla horêân uya da xe taan.*
 3PL rest arrive up CONN be.daylight
 'They rest until dawn.'
- b. *I cêê biin xe puxe-t xe i cêê khîlû.*
 3SG very be.weak CONN reason CONN 3SG very ill
 'He is very weak because he is very ill.' (lit. 'he is very weak, the reason is, he is very ill').

In (10)b there are two successive topics, the whole proposition '*i cêê biin*' is the first topic (as '*i khabwe*' is topical in (6)), and the noun *puxe-t* ('reason, origin, base'), which introduces the subordinate clause is the second one. Such facts point out the continuum between topicalisation, relativisation, complementation and subordination in Nêlêmwa.

3 *xe* as a relative marker

Relative clauses with *xe*, as in (1) and (11), introduce new information; they are similar to topic constructions, in that the term to the right is always a predicate.

- (11) *Fo agu xe hla uya.*
 there.are people CONN 3PL arrive
 'There are some people who are arriving.' (OR: 'there are some people, they are arriving.')

An indefinite head is always associated with identifying relatives with *xe*; thus, in (11) *agu* is referentially indefinite; but the head may also be definite, as in (12).

- (12) *Kôôbwan xe i fawulu hliibai thaamwa xe hli haga.*
 yesterday CONN 3SG speak.to those2.ANAPH woman CONN 3DU fish
 'Yesterday, he spoke to those two women who were fishing.'

These women have already been mentioned, they are thus determined by an anaphoric pronoun, but they are now identified as those who were fishing. In (12), two of the functions of *xe* appear, the first occurrence is the topic marker, and the second occurrence is the relative clause marker.

The degree of definiteness of the head is thus irrelevant. What matters is the type of relation that obtains between the head and the relative clause. If this relation is topical (first predicated) and identifies the head, it is marked by *xe*. If it is already shared information, it is backgrounded and marked by a deictic or anaphoric pronoun.

All the syntactic functions of the head may be relativised by *xe* as shown in sentence (13)a, and *xe* is compatible with any syntactic function of the relativised term, as shown in (13).

In sentence (13)a, the head is a locative noun: *na bwee-n* ('on top-her').

- (13)a. *Me hli khaayi adaga na bwee-n xe i mago.*
 and 3DU take.off comb LOC top-POSS.3SG CONN 3SG sleep
 'And they take the comb off her head (she) who is sleeping.'
 (lit. 'from top-her who is sleeping')
- b. *Yo axe hleena ââ-hî xe hla thivi.*
 2SG see those.DEICT seedlings-POSS.1DU CONN 3PL pull.out
 'You see those seedlings of ours that they are pulling out.'

The morpheme *xe* only signals that the relation between the head and the relative is topical and identifying. Again, in examples (14) and (15), *xe* has both functions, as a left-dislocation marker and a relative marker:

- (14) *Habwali-n xe hooli habwan xe hmwêên xa foro.*
 clothes-POSS.3SG CONN that.ANAPH clothes CONN be big also be.white
 'Her clothes, they are the clothes that are big and white.'

The first occurrence of *xe* marks *habwali-n* as the topic; the second occurrence qualifies and identifies the noun *habwan*. But if the determination is backgrounded, as in (15), a post-head anaphoric pronoun *bai* appears and stands as the trace of the preconstructed determination:

- (15) *Habwali-n xe hooli habwan bai hmwêên*
 clothes-POSS.3SG CONN that.ANAPH clothes that.ANAPH be.big
xa foro.
 also be white
 'Her clothes, they are the big and white clothes.'

What is more, qualifying stative verbs (adjective-like predicates, such as 'be white') are never used as attributive premodifiers and rarely as attributive postmodifiers in Nêlêmwa. They are predicates, and as such are constructed as postmodifying relatives marked by either *xe* or a deictic or anaphoric marker (as in (14) and (15)). Attributive (adjective-like) postmodifiers constitute a very limited set of lexicalised forms (such as *doo ulo* 'red earth, laterite' (lit. 'earth red')). All the various functions of *xe* (left-dislocation, verb complementiser and relative marker) refer to one unique principle: it signals topical, identifying determination.

4 Backgrounded relative clauses with deictic or anaphoric determiners

When relative clauses are associated with deictic or anaphoric determiners, they refer to backgrounded determination.

4.1 Subject/actor relative clauses

The post-head deictic or anaphoric determiner is marked for number concord with the head, (*bai* is singular in (16) and *mahleena* is plural in (17)). Besides, the subject pronoun of the relative clause is optional (see (16) and (17)) when it refers back to the head.

A. Post-head anaphoric determiner:

- (16) *Na mwimwi agu bai (i) tii tiiwo hleny.*
 1SG know person that.ANAPH (3SG) write letter this.DEICT
 'I know the man who wrote this letter.' (lit. 'I know that man (he) wrote the letter')³

'I know the man who wrote this letter', constitutes backgrounded determination and refers back to some prior mention or discursive identification, such as: 'I know a man, he wrote a letter/who wrote a letter', which would be marked by *xe* in Nêlêmwa.

B. Post-head directional or deictic determiner:

When the reference is situational, the marker is a deictic or a directional determiner.

- (17) *Na fawulu hulak mahleena (hla) taabwa mwena.*
 1SG speak old.people these.DEICT (3PL) sit place.DEICT
 'I spoke to these old people who are sitting/are seated there.'

4.2 Object/patient relative clauses

In object/patient relative clauses (18), the subject pronoun of the relative clause is not optional as it is not coreferent with the head. Deleting it would result in a construction with passive and resultative meaning. Thus, deletion of the subject pronoun *i* in (18) would mean 'the coconuts which have been picked'.

- (18) *Na yovi nu mahleena i nixi.*
 1SG gather coconut those.DEICT 3SG pick
 'I am gathering the coconuts she is picking.'

Constructions with *xe* bar the deletion of the subject pronoun in the relative clause; this is consistent with the fact that *xe* marks a process of identification. Only backgrounded relative determination with a post-head deictic or anaphoric marker allows such deletion. Compare sentence (20)a with (20)b which has resultative, non active meaning. The term 'non-active' is preferred to passive since the transitive suffix *-ri* (*yari*) is maintained as in an active construction. It is non-active semantically because of unexpressed agentivity, resulting from the deleted subject pronoun *hla*.

- (19) *Mwa-m ho-iva?*
 house-POSS.2SG this-where?
 'Which is your house?'

³ A similar construction *I know the man wrote this letter* exists in some varieties of English.

- (20)a. *mwa eli hla ya-ri o maaxi*
 house this.ANAPH 3PL roof-TR PREP thatch
 'the house they roofed with thatch'
- b. *mwa eli ya-ri o maaxi*
 house this.ANAPH roof-TR PREP thatch
 'the house roofed with thatch'

5 Contrastive examples of relative constructions

The construction of relative clauses thus parallels the various steps by which determination is built in discourse:

- on the one hand, foregrounding (first mention), as an identifying process marked by *xe*; it is similar to the process of left-dislocation by which something is topicalised, predicated on and identified, as in sentence (21),
- on the other hand, backgrounded (preconstructed) determination associated with a deictic or anaphoric determiner, as in sentence (22).

A. Identifying determination with *xe*:

- (21) *Na tu thaamwa aa-xiik xe i yeenare vhaa Nêlêmwa.*
 1SG find woman CLASS-one CONN 3SG learn.TR talk Nêlêmwa
 'I've met a woman who was learning the Nêlêmwa language.'

(The subject pronoun of the relative clause CANNOT be deleted.)

B. Backgrounded determination with an anaphoric or deictic marker:

- (22) *Na tu thaamwa bai (i) yeenare vhaa Nêlêmwa.*
 1SG find woman that.ANAPH (3SG) learn.TR talk Nêlêmwa
 'I've met **the** woman who was learning the Nêlêmwa language.'

(The subject pronoun of the relative clause is optional.)

6 Realis versus irrealis determination: *xe* and *o* in topical relative clauses

In interrogative, negative, hypothetical, or irrealis contexts, that is, when determination remains virtual, *xe* commutes with the irrealis marker *o*. This points out the grammaticised function of *xe* from its discursive function as the topic marker to that of a relativiser and complementiser.

6.1 Injunctive contexts

Xe is associated with assertive, realis mood, while the virtual/irrealis marker *o* is naturally associated with injunctive, hypothetical and negative utterances.

– Assertive:

- (23) *Na îyûlî taraushi xe tadalan.*
 1SG buy trousers CONN be.black
 ‘I bought **a** black pair of trousers.’ (lit. ‘a pair of trousers which is black’)

– Injunctive:

- (24) *Na-me orop o ulo shi-ny.*⁴
 give-DIR dress VIRT be.red side-POSS.1SG
 ‘Give me **a** red dress.’ (lit. ‘a dress which is red’)

Yet, if the existence of the term is unquestionable, *xe* may appear. In (25)a, *xe* points out that the speaker has no doubts about the existence of such a knife, whereas *o* points to its hypothetical existence:

- (25)a. *Fhe-dume hele xe caak.*
 bring-DIR knife CONN be.sharp
 ‘Bring me **a/the**⁵ sharp knife.’ (lit. ‘a knife which is sharp’)
- b. *Fhe-dume hele o caak.*
 bring-DIR knife VIRT be.sharp
 ‘Bring me **a** sharp knife.’ (lit. ‘a knife which would be sharp’)

The virtual morpheme *o* also appears in verbal complementation as well as in subordination with hypothetical meaning, as *xe* does in realis, assertive contexts. Thus, compare the irrealis mood of (26) with the realis mood of (10)a which is part of a narrative:

- (26) *Io na xam gaa shayailî me uya da o na kûûlî.*
 FUT 1SG ASS CONT work.TR AIM arrive up VIRT 1SG finish.TR
 ‘I will be working at it until I finish it.’

The virtual marker is due to the presence of the future marker (*io*) in the main clause.

Complementation of verbs with irrealis meaning also makes use of *o*; this is the case with negative verbs or verbs with tentative meaning.

- (27) *I kuat o i yagei-e.*
 3SG refuse VIRT 3SG help-3SG
 ‘She refuses that he should help her.’ (lit. ‘she refuses if he helps her’)
- (28) *I khaxac o i â.*
 3SG hesitate VIRT 3SG go
 ‘He is hesitating whether to leave.’

⁴ Compare with the backgrounded relative determination marked by the deictic determiner *-ena*:

Na me orow-ena ulo shi-ny.
 give DIR dress-that.DEICT be red side-POSS.1SG
 ‘Give me **the** red dress.’ (lit. ‘the dress that is red’)

⁵ The definite value is contrastive (and refers to that particular knife he has in mind). But as the person spoken to may not know about such a knife, as it is first mentioned, the determination is foregrounded and *xe* appears.

6.2 Negative contents

In a negative context, when the referentiality of a term or process is not asserted, the relative clause is also marked by *o*. This occurs in negative existential constructions with *kiya* and in negative sentences marked by *kio*. The negative existential predicate *kiya* ('there is not') bars any kind of referential identification, thus *o* is required:

- (29) *Kiya agu o na axi-e.*
 NEG.PRED person VIRT 1SG see-3SG
 'I did not see anybody.' (lit. 'there isn't any one I saw')

The case of the negative morpheme *kio* is more complex. The type of construction depends on the scope of the negation, and on which of the predicates (that of the main clause or the relative clause) is negated.

In sentence (30), the negation bears on the predicate of the main clause. Both constructions with *xe* and *o* are licensed, with different values, though *o* is by far the most common and semantically neutral marker. In the construction with *o* (30), the negation has scope on the whole sentence, the whole process is negated (= I did not see numerous dwellings).

Kio < main clause + relative determination >:

- (30) *Kio na axe awôlô o khoxo.*
 NEG 1SG see dwellings VIRT be.many
 'I have not seen many dwellings.' (lit. 'dwellings that would be many')

(They may be numerous, but I haven't seen them.)

Khoxo 'be many' is a stative quantifying predicate which cannot be used as an attributive pre- or post-modifier (similarly to qualifying adjective-like stative predicates). Choosing the construction with *xe* in (30) would state the existence of a great number of houses and would only suggest that the speaker has not seen them; this would mean 'I have not seen **the** numerous houses'.

If the negation has scope only on the predicate of the relative clause, while the main clause is asserted, only *xe* may appear. What is negated in (31) is the quantifier predicate *khoxo*, not the process itself, thus allowing *xe*.

< main clause > < *kio* + quantifier predicate >:

- (31) *Na îyûlî pwâ-ciic xe kio khoxo.*
 1SG buy fruit-tree CONN NEG be.many
 'I have not bought many fruit.' (lit. 'I have bought fruit that are not many')

The main clause is topical, *xe* signals that the postmodification constitutes new information.

6.3 Interrogative contexts

Similarly, in interrogative contexts *o* is associated with irrealis and *xe* with realis mood. To some extent, the 'some'/'any' doublet in English interrogative sentences has a similar function ('do you want some/any...?'):

- (32) *Fo aguk o i taau-ri wany?*
 there.is person VIRT 3SG wait-TR boat
 'Is there anyone waiting for the boat?' (lit. 'who might be waiting for the boat?')

With *xe*, one just inquires for an indisputable fact to be confirmed. Thus (33) could be an echo question to (31):

- (33) *Co îyûlî pwâ-ciic xe cêê khoxo?*
 2SG buy fruit-tree CONN very be.many
 'Have you (really) bought a lot of fruit?' (lit. 'You bought fruit that are numerous?' OR: 'You bought some fruit, are there a lot of them?')

7 Construction of relative clauses and resumptive traces

In Nêlêmwa, the morphemes which function as 'relativisers' (*xe*, deictic or anaphoric determiners) never mark the syntactic or case function of the relativised position in the relative clause, as relative pronouns 'who', 'whom' and 'whose' do in English. The syntactic function (argument or adjunct) of the relativised element in the relative clause is marked by resumptive traces *in situ* which allow the coreference necessary for both segments (main and relative clauses) to be linked. As has already been pointed out, there is no hierarchy of syntactic functions that may be relativised; all arguments and adjuncts are relativisable and recoverable by resumptive traces, whatever the type of relative clause. Not surprisingly, these traces are similar for all types of operations involving movement and deletion of terms in a sentence (such as left-dislocation, cleft construction and relative clauses). Those pronominal resumptive traces support Keenan's (1985:148) prediction that:

RCs which express NPrel as a personal pronoun typically allow a greater range of positions to be relativised compared with RCs which do not use such pronouns.⁶

Here is an overview of the various resumptive traces *in situ* in both types of relative clauses in Nêlêmwa. Resumptive subject and object pronouns are specific to animates (inanimates are always zero-marked).

7.1 Subject/actor function

Resumptive subject pronouns only mark nominal animates. To sum up: (a) with the *xe* construction, the subject pronoun is the obligatory resumptive trace (21); (b) in the backgrounded construction (with a deictic or anaphoric marker), the subject pronoun is optional when it refers back to the head (22), and it is obligatory when it is not coreferent with the head, otherwise resulting in a non-active meaning; compare examples (20)a and (20)b.

⁶ RCs = restrictive relative clauses. NPrel marks the relativised position in the relative clause.

7.2 Direct object/patient function

The obligatory resumptive trace for nominal animates is an object pronoun suffixed to the verb of the relative clause (/Ø/ for inanimates):

- (34) *Na mwimwi agu bai yo axi-e kôôbwan.*
 1SG know person that.ANAPH 2SG see-3SG yesterday
 'I know the man you saw yesterday.' (lit. 'I know the man you saw him yesterday')

7.3 Traces of indirect objects and adjuncts

Indirect objects are marked by various case-marking prepositions. In relative clauses, such functions are recoverable *in situ* either by prepositional pronouns (for animates) or by anaphoric markers (for the locative or instrumental case which refer to inanimates).

7.3.1 Indirect objects referring to animates

An argument is marked as beneficiary or origin by the inalienable noun *shi*-⁷ (+ possessive suffix) which is grammaticised into a case-marking morpheme: the beneficiary is marked by *shi*-, the origin by *na shi*- (36).

- (35) *Na fawulu agu bai co îyû-lî khoo-m nok*
 1SG speak person that.ANAPH 2SG buy-TR food-POSS.2SG fish
na shi-n.
 LOC side-POSS.3SG
 'I spoke to the person you bought your fish from.'

Compare with:

- (36) *Na îyû-lî khoo-ny nok na shi agu bai.*
 1SG buy-TR food-POSS.1SG fish LOC side person that.ANAPH
 'I bought my fish from that person.'

A comitative object is marked by *ma* which is both a coordination and the comitative case-marker ('and, with'):

- (37) *Ye hî thaamwa eli pe-fââlâ-hli ma ye.*
 3SG.INDEP this woman that.ANAPH RECIP-way-POSS.3DU COMIT 3SG
 'Here is the woman he has travelled with.'

An associative object is marked by *vi* which is the grammaticised form of the verb *fhe* 'bring':

⁷ *Shi-n* is an inalienable noun meaning 'hand, member'; it also has a locative meaning ('side', 'at someone's place', 'among'). It is grammaticised as a preposition and marks the beneficiary or the origin case function in association with the locative *na*.

- (38) *Ye hoona âlô eli io i mu vi ye.*
 3SG.INDEP this.DEICT child this.ANAPH FUT 3SG stay ASSOC 3SG
 'Here is the child he will adopt.' (lit. 'he will live with him')

7.3.2 Locative case function

The resumptive trace of most locative adjuncts is marked by the anaphoric locative pronoun *le*.

- (39) *I uya ni kuut pwa-giik xe hla mu le*
 3SG arrive in bay CLASS-one CONN 3PL stay LOC.ANAPH
hulak mahleeli.
 aged these.ANAPH
 'He arrives in a bay where these old folks live.'

7.3.3 Traces of indirect inanimate objects marked by the preposition *o* or *nao*

The preposition *o* (which is homophonous with the irrealis marker *o*), marks indirect inanimate objects with various meanings (cause, source, instrument, location). *Nao* is a locative preposition which also marks the indirect inanimate object of various verbs, among which are verbs of speech ('speak of, ask about'). The anaphoric resumptive trace of such prepositional arguments is also marked by *le*:

– Resumptive trace of indirect objects with causal, source meaning:

- (40) *Hla pe-faaxeen o foliik bai hla xam pe-vhaa*
 3PL RECIP-inquire PREP thing that.ANAPH 3PL ASS RECIP-discuss
le.
 LOC.ANAPH
 'They ask each other what they are discussing about.'

The base construction would be: *hla pe-vhaa nao delek* 'they are discussing about land (rights)'.

– Resumptive trace of the instrumental case:

- (41) *Ehî pâânât bai na khiiboxa ko le.*
 here.is stone that.ANAPH 1SG hit hen LOC.ANAPH
 'Here is the stone I hit the hen with.'

The base instrumental construction would be: *na khiiboxa ko o pâânât* 'I hit the hen with a stone.'

7.3.4 Traces of a possessive determination

When the possessor is the relativised term in the relative clause, the resumptive traces vary with the nominal class. They are either possessive suffixes, when it is a bound (inalienable)

noun, as in (42)a, or a preposition (*i*, *o*) + an object pronoun, if it is an independent, alienable noun (42)b.

- (42)a. *Na mwimwi agux-ena aa-ru pwaxi-n.*
 1SG know person-this.DEICT CLASS-two child-POSS.3SG
 'I know the man (who has) two children.'
- b. *Co mwimwi agux-ena wa-du loto i ye?*
 2SG know person-this.DEICT CLASS-two car PREP 3SG
 'Do you know the man who has two cars?'

8 Postmodification and aspect

Several variations have been noted so far, such as the variation between *xe* and *o* (realis versus irrealis mood, see §6). Some diathetic variations (active versus non active or resultative) are marked by the deletion of the subject pronoun in backgrounded relative clauses (see §4.2). Also, the construction of relative clauses also varies with aspect (mainly durative and resultative).

8.1 Nominalised resultative postmodification

Nominalisation is another possible strategy to express resultative postmodification bearing on a patient (compare with the constructions in §4.2). Two prefixes have such function in Nêlêmwa: *shâ-* and *hna-*; they constitute non finite juxtaposed postmodification. Moyse-Faurie (1995:45) and Osumi (1995:248) note similar constructions in Xârâcùù and Tinrin. Such nominalisations are reminiscent of participial constructions: the underlying agent of the process is marked as the possessive determiner of the nominalisation.

8.1.1 Prefix *shâ-*: collective, resultative postmodification

The form *shâ-* is a collective prefix (derived from *shaget* and expressing a container/contained relationship, as in the 'crew' (of a boat), the 'inhabitants' (of a country), the 'catch' (at fishing and hunting). This prefix may nominalise verbs as in sentence (43) or it may be prefixed to nouns as in sentence (44). It always expresses resultative and collective meaning.

– Prefixed to a verb (as nominal derivation):

- (43) *Na khu-xi mugic shâ-khîlî-wo i nyanya.*
 1SG eat-TR bananas COLL-cook-COLL PREP Mummy
 'I have eaten the bananas cooked by Mummy.' (lit. 'I have eaten the bananas result of cooking of Mummy')

The nominalised verb (*shâ-khîlî-wo*) has an indirect possessive determiner (*i nyanya*) which encodes an underlying agent (*nyanya*), (e.g. the banana Mummy cooked). The determined head (*mugic*) is semantically a patient. Such juxtaposed nominalised postmodification is one of the various strategies by which backgrounded relative clauses are constructed, with a specific resultative meaning, preserving the topic continuity of the patient.

– Prefixed to a noun (composition):

- (44) *Na khu-xi mugic shâ-cela⁸ nyanya.*
 1SG eat-TR bananas COLL-cooking.pot.of Mummy
 ‘I have eaten the bananas cooked by Mummy.’ (lit. ‘...the bananas contained by cooking-pot of Mummy’)

Semantically, this type of nominalised stative/resultative postmodifying construction deactivates both process and agent. There being no passive voice in Nêlêmwa, such a construction has diathetic functions. It reverses the active perspective ‘he is eating the bananas his mother cooked’, towards the resultative, non-active meaning ‘he is eating the bananas cooked by his mother’ expressed as a possessive determination (lit. he is eating the bananas cooking of his mother). The agent is demoted to the function of possessive determiner.

In Xârâcùù, the nominalising prefix *êê-* (which may be related to the nominalising prefix *êrê-* ‘consequence, result’) is used in similar postmodifying determination.

- (45) *È kê pwî êê mwata na rè anyââ.*
 3SG eat banana PR.NOM grate PAST DET Mummy
 ‘He is eating the bananas grated by Mummy.’ (Moyse-Faurie 1995:49)

Tinrin has a similar construction with the prefix *hêrrê-* ‘content of’; compare examples (46)a and (46)b:

- (46)a. *Nrâ nrêê harru nrâ kafe ke fwi.*
 3SG taste good SM coffee 2SG make
 ‘The coffee you made is good.’ (Osumi 1995:248)
- b. *Nrâ nrêê harru nrâ kafe hêrrê fwi nrâ nrü.*
 3SG taste good SM coffee PR.NOM make REL.POSS 2SG
 ‘The coffee made by you is good.’ (Osumi 1995:248)

8.1.2 Prefix *hna-* (‘place of’): resultative, locative postmodification

The nominalising locative prefix *hna-* is yet another way of expressing resultative/non-active meaning in backgrounded relative clauses bearing on a patient. In sentence (47), the indirect possessive determiner (*i hli*) of the nominalised postmodification (*hna-yuura-wo*) also encodes an underlying agent (*they have dug*).

- (47) *I axe fwa mahleeli hna-yuura-wo i hli.*
 3SG see hole these.ANAPH place-dig-COLL PREP 3DU
 ‘He sees the holes they have dug.’ (lit. ‘he sees the holes place of their digging’)

A similar construction is used in Nengone (Maré, Loyalty Islands):

⁸ *Cela* is the determined form of *cet* ‘cooking-pot’; *cela nyanya* thus means ‘Mummy’s cooking-pot’ (lit. ‘cooking-pot of Mummy’).

- (48)a. *Nidi seseko kore ciboretan hna iye hnei buic.*
 very true ART news PAST bring AGT-of 3PL
 'The news that they brought is very true.' (Ozanne-Rivierre, cited in Moyse-Faurie 1983:144)
- b. *Buic ci a-ehNe-ni ore ruace hne-i buic hna rue.*
 3PL PRES CAUS-be.visible-TR ART work AGT-of 3PL PAST do
 'They show the work they have done.' (Ozanne-Rivierre, cited in Moyse-Faurie 1983:144).

and in Drehu (Lifu, Loyalty Islands):

- (49) *Ame la uma hna dreuth hnei angeic.*
 here.is ART house PAST burn AGT 3SG
 'Here is the house (that) he has burnt.' (Moyse-Faurie 1983:178).

Table 1: Summary of these constructions in Nêlêmwa

Type of determination	Ded head	Relative clause or postmodification
Active	Noun	+ subject pronoun + V (see (20)a)
Resultative	Noun	+ deleted subject pronoun + V (see (20)b)
Resultative, non-active	Noun	+ nominalisation (<i>shâ</i> -, <i>hna</i> -) + possessive determiner

8.2 Durative postmodification marked by *na*

The durative postmodification which is marked by *na* (derived from *hna* 'place of') only occurs with a relativised actor or agent. It requires the deletion of the subject of the postmodifying verb, under coreference with the head. Besides, a subject pronoun after *na* would lead to another interpretation, that of the homophonous *na* (the coordination 'but'); thus, *na hli haga* in sentence (50) would mean 'but they were fishing'.

- (50) *Kôôbwan xe i fawulu hliibai thaamwa na haga.*
 yesterday CONN 3SG talk these2.ANAPH woman DUR fish
 'Yesterday, he talked to the two women (who were) fishing.'

Sentence (50) stresses duration of the process, but it is otherwise very similar to the construction with *xe* in (51) or in (12), which is new information:

- (51) *Ni shade bai xe i yaagei hliibai thaamwa xe*
 in week that.ANAPH CONN 3SG help.TR these2.ANAPH woman CONN
hli thaxi mido.
 3DU plant taro
 'Last week, he helped the women who planted/were planting taro.'

9 Construction of relative clauses in other Kanak languages

Most Kanak languages seem to have a double pattern, with various degrees of complexity. Cèmuhî (Rivierre 1980:176) also has linkers derived from deictic or anaphoric determiners: *ce* 'this' (near), *naa* 'that' (anaphoric), *li* 'that' (anaphoric, referring to past, known items). These deictic and anaphoric determiners are used in much the same way as in Nêlêmwa.

- (52)a. *a pèii cè úbwö*
 the stone this.DEICT big
 'this stone which is big' (Rivierre 1980:173)
- b. *a pèii cè naa pwájó*
 the stone this.DEICT that.ANAPH white
 'this stone which is white' (Rivierre 1980:176)
- c. *li apuliè li lé ábé*
 the people ANAPH 3PL come
 'the people who came' (Rivierre 1980:176)
- d. *a-li ila li é lang*
 the pot ANAPH it.is there
 'the cooking-pot which is there' (Rivierre 1980:174)

In Tinrin, Osumi (1995) notes the following:

...relative clauses are normally restrictive, since the non restrictive clausal modifier may usually be expressed in coordinate sentences...Relative clauses are expressed in two ways...The first makes use of *a* 'an attribute marker' ('one who') which has the same form as a nominaliser to indicate a habitual practitioner or person with a specific nature or qualification. (1995:265)

...*a* introduces a participial relative clause which applies only to subjects.⁹...They can also be linked with no specific relative pronoun or marking. (1995:268)

- (53) *saa bee-mwage a horro*
 one PR.NOM-play ATTRIB.MRK hard
 'a game that is hard' (Osumi 1995:267)

When no specific marker appears, relative clauses differ from coordinate sentences by intonation; finally a demonstrative (*rri*) may appear after the head NP.

Osumi (1995:240) states that some topicalisations are formally identical to relative constructions: '*the big tree that stands there*' can also be interpreted as '*the big tree, it stands there*'. But there is no topic marker in Tinrin (unlike Nêlêmwa), as "topic is expressed in a topic-shift construction" (Osumi 1995:239). Osumi notes that Tinrin's relative clause forming strategy seems to reflect Keenan and Comrie's (1977) accessibility hierarchy:

...only the subject position... can be relativised...with *a*. Relativised subject and direct object positions are marked by zero, whereas the possessor position, which has less accessibility, is marked by a pronoun. Oblique positions are split into two groups, with presumably the ones marked by zero having a higher accessibility for relativisation, and the ones marked by a pronoun having less. (Osumi 1995:274-275)

⁹ As in: 'people who always tell stories'.

There is no such hierarchy in Nêlêmwa, the two constructions (topical with *xe* and backgrounded with a deictic or anaphoric determiner), may apply indifferently to any syntactic function and their choice is linked to discursive strategies. Besides, all syntactic functions are marked by resumptive pronouns or traces.

There seems to be a fairly frequent pattern in relative clause forming strategy in Kanak languages. One of them makes use of a predicative marker (appearing in one of several forms: *a*, *ka*, *xe*) which is often associated with stative verbs or has identifying function; there are some variations according to languages. The second most common strategy makes use of a deictic or anaphoric determiner. Finally, there are non finite postmodifying constructions (usually nominalisations) which have specific aspectual or diathetic functions.

In Ajië (La Fontinelle 1976), relative clauses are introduced by *ka* (which is also a predicative marker) and by the demonstrative *rre* 'that'.

In Xâraâcûù, post-head deictic determiners such as *a* or anaphoric determiners such as *bwa* are used:

- (54)a. *mîî pa xûûchî a pa mwârâ*
 PL COLL child DEICT COLL play
 'these children who are playing' (Moyse-Faurie 1995:43)
- b. *Nâ pè mê nèké bwa ke fè mênêî na.*
 1SG take DIR basket ANAPH 2SG leave forget PAST
 'I am taking the basket you forgot on leaving.' (Moyse-Faurie 1995:58)

In Iaai, Loyalty Islands, (Ozanne-Rivierre 1976), active relative clauses may have no overt marker and are simply juxtaposed (as in (55)a) or they may be marked by a deictic or anaphoric determiner, mainly when the verb of the relative clause is in the past (as in (55)b).

- (55)a. *Oge me wɔ ito aa kot aŋ.*
 1SG PROCESS see house 3SG.PERF hit wind
 'I see the house which the wind has struck.' (Ozanne-Rivierre 1976:196)
- b. *Ogee wɔ at ejü aa oo eet.*
 1SG.PERF see man ANAPH 3SG.PERF arrive yesterday
 'I saw the man who arrived yesterday.' (Ozanne-Rivierre 1976:197)

The deictic *ejü* ('down') has anaphoric function in such constructions.

The predicative marker *a* is also used as a relativiser in clauses with a stative predicate, as in the following:

- (56)a. *Oge me wɔ at a e møk.*
 1SG PROCESS see man CONN 3SG be ill
 'I can see the man who is ill.' (Ozanne-Rivierre 1976:139)
- b. *Iŋ caa ke üŋa hiŋat a e ti xatəə-ŋa*
 1SG NEG one PRESENT old.man CONN 3SG very know-1SG
üŋa boŋon.
 PRESENT story
 'I am not an old man who knows the story very well.'
 (Ozanne-Rivierre 1976:183)

- c. *Oge me helɔɔm ke dok oge maa laba hɔin*
 1SG PROCESS look.for one place 1SG INACC stay in
a e sɔɔkoü ge ta-wɛɛt.
 CONN 3SG be.far from man
 'I am looking for a place that is far away from men.'
 (Ozanne-Rivierre 1976:197)

The morpheme *a* is multifunctional; it is also used as the left-dislocation marker with stative verbs (57) and used as a predicative attributive morpheme in postmodifying relative clauses with stative predicates (58) and has identifying functions:

- (57)a. *E sehɔin wanakat.*
 3SG be.happy child
 'The child is happy.' (Ozanne-Rivierre 1976:133)
- b. *Wanakat a e sehɔin.*
 child CONN 3SG be.happy
 'The child, he is happy.' (Ozanne-Rivierre 1976:133)
- (58)a. *moomo a e hmanenag*
 woman CONN 3SG be.beautiful
 'the beautiful woman' (lit. 'the woman who is beautiful')
 (Ozanne-Rivierre 1976:180)
- b. *U at a u biigaan.*
 2SG man CONN 2SG be.proud
 'You are a proud man.' (Ozanne-Rivierre 1976:180)

In Drehu, Loyalty Islands, (Moyse-Faurie 1983) relative clauses may be introduced by a deictic or anaphoric determiner (59) or with no overt marker, as merely juxtaposed postmodification, as in (60). (In the following examples, *a* is the present/aoristic tense-aspect marker, *ka* the stative marker, *kola* the durative aspect marker):

- (59) *Eni a wang la itre föe la ka hu-ixöe.*
 1SG PRES watch ART PL woman this.DEICT STAT weave-mat
 'I am watching the women who weave mats.' (Moyse-Faurie 1983:179)
- (60)a. *Angeic a thel la nekönatr a lep la kuli*
 3SG PRES look.for ART child PRES strike ART dog
a nyinyap.
 PRES run
 'He's looking for the child who's beating the dog who's running.'
 (Moyse-Faurie 1983:177)
- b. *Eni a wang la uma ka lolo.*
 1SG PRES watch ART house STAT beautiful
 'I am watching the beautiful house.' (lit. 'I am watching the house which is beautiful') (Moyse-Faurie 1983:177)
- c. *Eni a thel la itre atr kola isi.*
 1SG PRES look.for ART PL man DUR fight
 'I am looking for the men (who) are fighting.' (Moyse-Faurie 1983:178)

There are also cases of juxtaposed postmodification expressing possession with the marker *kê*:

- (61) *atr kê nekön*
 man POSS.CONN child
 'a man who has children' (Moyse-Faurie 1983:177)

Among the languages quoted (languages of the south, center-north and Loyalty Islands), only Tinrin (south) and Iaaï (Loyalty Islands) seem to have relative clauses structured as topicalised clauses, and only Nêlêmwa seems to have grammaticised such a type, with the *xe* marker used both as a left-dislocation, a relative marker and a complementiser. It is interesting to note that *xe* also has some of the predicative functions of the *ka*, *a* markers of the other languages mentioned. As for deictic/anaphoric markers, their use is general.

10 Conclusion

(1) There is no such distinction as restrictive and descriptive relatives in Nêlêmwa. According to the discursive context, descriptive relatives such as 'this book, which the children do not like, is a good book' would be expressed either as a *xe* construction or with a deictic or anaphoric marker according to whether the determination is identifying or backgrounded. More simply, it may be translated as an independent, paratactic construction, as in (62).

- (62) *Va perui ma aaru thaamwa, hlimaidu*
 1PL.EXCL meet COMIT two woman these2.down.there¹⁰
haga mwamaidu.
 fish down.there
 'I have met two women, those two who are fishing down there.'

When asked about constructions similar to descriptive relatives, informants generally feel they are very unnatural, and they fall back into one of those two structures, or a paratactic construction, with a certain bewilderment that the linguist should ask such odd, and unnecessary questions.

(2) Secondly, aspectual or modal values cause the possible commutation of *xe* and *o* (the irrealis marker) in topical, identifying relative clauses.

As for the active/non active contrast in backgrounded relative clauses, there are two possible constructions: one is by deletion of the subject pronoun, as in (20)b; the second makes use of nominalisations, in which case the underlying agent is coded as a possessor, as in (43) and (47).

(3) The double construction of relative clauses in Nêlêmwa – topical with *xe* /*o*, or backgrounded with an anaphoric or deictic marker – is evidence of the continuum between the construction of definiteness, relative determination and discursive organisation. As Givón puts it: "Relative clauses [...] partake in the grammar of anaphoric reference and referential identification" (Givón 1984:645).

¹⁰ The form *hlimaidu* is a dual directional pronoun.

Being part of the construction of reference, the construction of relative clauses reflects the various stages by which definiteness is encoded and the various discursive strategies according to which information is given.

Table 2: Summary table of Nêlêmwa relative clause constructions

Type of utterance	Identifying relative clause	Backgrounded relative clause or postmodification
Declarative (realis)	<i>xe</i>	anaphoric or deictic determiner
Unasserted (interrogative, negative, virtual mood)	<i>o</i>	*
Declarative, with resultative aspect	*	<i>shâ-; hna-</i> + patient/object
Declarative, with durative aspect	*	<i>na</i> + actor/subject
* marks a non-existent construction		

The link between topicalisation and relative clauses is often pointed out cross-linguistically. In many Austronesian languages, including Philippine languages, Indonesian languages, and Malagasy (Keenan 1976:265), only topics may be relativised. In Chamorro (Western Austronesian, Micronesia), topicalisation, question formation and relativisation are structurally similar:

[...] a referent is first established as topic, question word or head of relative clause, and then expanded on. (Wouk 1986:149).

Consequently, relativisation of an actor requires the 'Actor topic' construction and relativisation of a patient requires the 'Patient topic' construction, as in Philippine and Indonesian languages (for Tagalog, see Schachter 1976:500). In Palauan (Western Austronesian, Palau Islands, Micronesia), Hagège (1986) and Lemaréchal (1991) also point out the link between topicalisation and relative clause construction. Actor/subject and Patient/object relative clauses require different constructions. The relativised noun is marked by (*e*)/*l*, but in an Actor/subject relative clause – i.e. with the actor as topic –, the "indicative" construction is used:

- (63)a. *A redíl a s-il-seb-ii a blái.*
 ART woman burn-PERF-burn-3SG.OBJECT ART house
 'The woman has burned the house.' (Lemaréchal 1991:214).
- b. *A redíl el s-il-seb-ii a blái*
 ART woman CONN burn-PERF-burn-3SG.OBJECT ART house
a m-l-ó er a kelebús.
 go prison
 'The woman who has burned the house will go to prison.'
 (Lemaréchal 1991:115).

A Patient/object relative clause with the Patient/object as topic triggers the use of the "passive-hypothetic" construction ((64)b and (65)c) which is marked by a special paradigm of Actor/subject pronominal prefixes. The patient is left-dislocated, but a pronominal trace is left in its object position on the verb, so that the syntactic functions are preserved, only the position has changed, compare (63), (64)a, and (65).

- (64)a. A *blái* a *le-s-il-seb-íi* a *redíl*.
 ART house 3SG.PASS-burn-PERF-burn-3SG.OBJECT ART woman
 'The house was burned down by the woman.' (lit. 'the house, the woman burned it down') (Josephs 1975:453, cited in Lemaréchal 1991:213)
- b. a *blái* *el* *le-s-il-seb-íi* a *redíl*
 ART house CONN 3SG.PASS-burn-PERF-burn-3SG.OBJECT ART woman
 'the house that the woman burned down' (Lemaréchal 1991:214)
- (65)a. A *áad* a *mos-terir* a *ngalek*.
 ART man see-3PL ART child
 'The man saw the children.' (cited in Foley & Van Valin 1985:316)
- b. A *ngalek* a *le-bos-terir* a *áad*.
 ART child 3SG.PASS-see-3PL ART man
 'The children were seen by the men.' (cited in Foley & Van Valin 1985:316)
- c. a *le-bos-terir* a *áad* *el* *ngalek*
 ART 3SG.PASS-see-3PL ART man CONN child
 'the children which were seen by the men' (cited in Foley & Van Valin 1985:317)

Foley and Van Valin (1985:317) note that:

The explanation for these Palauan data seems to be that a left-dislocation or topicalisation construction began to be used in relative clauses to meet the constraint that only topical NPs were relativizable. [...] It may also explain somewhat the situation in Tagalog and other Philippine languages. [...] the topic became the pivot for more and more of the syntactic processes [...].

Relative clauses, whether in the "passive-hypothetic" construction or the "indicative" construction, are marked by the multifunctional morpheme (*e*)*l* (a specifier or connector, Hagège 1986:116) which introduces attributive or predicative adjectives, relative clauses, and which is also a subordinator and complementiser (Hagège 1986:115-133; Lemaréchal 1991:114-139). Basically, this morpheme constructs various types of complementation (Lemaréchal 1991:131). This shows an interesting parallelism with the multifunctional morpheme *xe* in Nêlêmwa (left-dislocation marker, complementiser and relativiser).

Topicalisation (or 'focus') thus underlies relative clause construction in many Austronesian languages. Besides, topicalisation (or 'focus') is closely related to definiteness and referentiality: an indefinite, non-referential term cannot be chosen as a topic ('focus') and only topics may be relativised (Schachter 1976:514). Thus, the construction of relative clauses in Nêlêmwa with either *xe* or a deictic or anaphoric determiner, according to whether a term has already or not yet been determined, is a close parallel to topicalisation in Western Austronesian languages. The rule might be stated thus: if the relative determination is already referential, use an anaphoric or deictic as a linker; if it is new information, make it topical by using the topic marker *xe*. The only major difference in Nêlêmwa is that topicalisation is

discursive and linked to the construction of reference; it is not associated with diathesis as it is in Western Austronesian languages. Besides, there is no such syntactic and diathetic constraint on actor/patient relativisation as in Palauan, since both strategies (*xe* or an anaphoric/deictic determiner) can be used with any syntactic function in Nêlêmwa. Topicalisation and relativisation in Nêlêmwa are linked to the construction of reference in discourse, in a strikingly similar way to what Justus describes for Hittite where the relative construction is marked either by an inflected *ku-* marker (which is also a topic marker and indefinite marker¹¹) or without a relative marker according to “the topic status of the shared noun phrase in the syntactic construction as a whole.” (Justus 1976:216). The absence of a relative marker occurs when the shared noun is thematic (i.e. old information). The topic function of *ku-* is primary, it is secondarily a marker of subordination and indefiniteness (1976:225). The *ku-* introduced relative noun is new information (1976:235), so the indefinite, non anaphoric character of the relative *ku-* results from its function as focus marker introducing non anaphoric, new information (1976:238-239).

O’Neil (1977) (cited by Hopper & Traugott 1993:190) suggests similar developments in the history of relative clauses in English:

[...] relative clauses started out essentially as adjuncts, that is, as paratactic clauses close to the end of the sentence. [O’Neil] hypothesizes that their path to integration within the matrix clause was via a stage of topicalisation which moved certain relative clause structures to the left of the sentence; this is a stage of hypotaxis. Finally, clauses came to be embedded as dependent clauses immediately associated with their head nouns.

At the paratactic stage, there being no relative pronouns in Old English, an uninflected connector (*pe*), which was both a relativiser and a subordinator, marked the clause boundary between main and relative clauses and connected them without indicating case.

- (66) & *pa men comon on East Engle pe on þam anum scipe*
 and the men came to East Anglia CONN on that one ship
wæron swiþe forwundode.
 were very wounded
 ‘And the men who were on that sole (surviving) ship came to East Anglia
 severely wounded.’
 (ChronA [plummer] 897.51; cited in O’Neil 1977:200, cited in Hopper &
 Traugott 1993:192).

¹¹ “The special marker *ku* is a pronoun with a stem *kw-*, which like its Latin cognate *qui-* served as an inflectable relative-interrogative-indefinite pronoun stem. [...] Justus argues that the use of the relative-interrogative-indefinite pronoun *kw-* to mark the focal NP (i.e. introducing new information) in thematic clauses (i.e. containing old information) [...] is a characteristic of somewhat later Hittite texts. But even at this later stage, [...] *ku* functions as the indefinite marker of a noun phrase in an independent clause rather than a “relative pronoun”. [...] what appears to be a correlative clause is in fact a topic clause that states a theme whose domain is not just the next clause but, potentially, several following clauses [...]. Eventually the *kw-* came to be understood as grammatically linking the theme clause to the following clause. [...] We have here an example of a relative clause construction which was originally not a grammatical entity but simply part of the way in which discourses are organised in a particular language coming to be grammaticalised as an embedded clause.” (Justus 1976, quoted by Hopper & Traugott 1993:193-95).

Dependency and integration occur when relatives must be adjoined directly to the clause in which the head occurs, and furthermore, subject relatives are topicalised to the left of that clause. (Hopper & Traugott 1993:192).

- (67) *Ure ieldran þa þe þas stowa ær hioldon,*
 our forbears those CONN these places previously held
hie lufodon wisdom.
 they loved wisdom
 'Our forbears who previously possessed these places, they loved wisdom.'
 (c. 880, CP LetWærf 31; cited in O'Neil 1977:202, cited in Hopper & Traugott 1993:192).

An anaphoric demonstrative pronoun bearing the case and number of the head noun may precede the connector *þe* (as in sentence (67)); thus pointing out that the two functions now conflated in the relative pronouns of Modern English, that of connector and anaphora, were dissociated in Old English. Again, the multifunctional feature of the connector crops up (*þe* is a relativiser, subordinator or complementiser), as the connector *that* is in modern English.

Such parallels are not meant to suggest that relative clause forming strategies in New Caledonian languages represent an earlier stage of development that might lead to a similar evolution, but they help point out interesting crosslinguistic features in relative clause forming strategies, among which are the relation between topicalisation and relativisation and the multifunctional aspect of the 'relativisers' which construct it.

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12 *Un exemple de morphosyntaxe en Nengone (Nouvelle-Calédonie): les variations morphologiques et la transitivité*

R. DAVEL CAWA

1 Introduction

Parlé sur les îles de Maré et de Tiga, le Nengone est une des langues mélanésiennes des Îles Loyauté (Nouvelle-Calédonie) avec le Drehu (à Lifou) et le Iaai (à Ouvéa où une deuxième langue, polynésienne, est également utilisée, le Faga Uvéa). ‘Nengone’ est le terme employé par la population pour nommer leur île. Le ‘Pene Nengone’ dans sa première acception, est la langue des maréens (la seconde étant – selon sa traduction littérale ‘manières du pays nengone’ – la culture). Il possède 3 registres:

- Le pene egesho ou langage trivial voire insultant
- Le pene animac ou langage courant
- Le pene iwateno ou langage respectueux

Quelques variantes lexicales sont perceptibles entre l’Est et l’Ouest de l’île. La différence se révèle encore davantage au niveau de la musicalité ou de la mélodie. Les locuteurs ont tendance à parler plus lentement à l’Est (c’est le ‘pene wanama’) par rapport à ceux de la partie ouest de l’île.

Le Nengone fait partie des langues océaniques de la grande famille austronésienne. Avec les deux autres langues mélanésiennes citées, ils forment un sous-groupe – celui des Îles Loyauté- différent de celui des langues de la Grande-Terre. La population Nengone s’élève à un peu plus de 8,000 habitants dont une partie vit sur la Grande-Terre (à Nouméa notamment) pour des raisons professionnelles.

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Pour la présente communication, je vous ferai part des remarques relatives au phénomène de morphosyntaxe du Nengone. Il s'agit essentiellement des variations de formes de la marque de transitivité, les différents types de flexion verbale et quelques exemples de dérivation flexionnelle d'un point de vue morphologique et sémantique. J'ajouterai que je me suis inspiré principalement des travaux de C. Moyse-Faurie (1983) sur le Drehu, langue voisine dont la morphologie voire la syntaxe ne sont pas si éloignées du Nengone notamment dans la structuration du système verbal. Précisons enfin que, outre l'inscription de son enseignement à l'école élémentaire, le Nengone est au programme du Baccalauréat à titre optionnel depuis 1994 dans certains lycées de Nouméa

2 La derivational flexionnelle

2.1 La reduplication

Ce type de flexion que subissent certains lexèmes verbaux est pertinent dans la mesure où il n'indique qu'une dérivation sémantique. La reduplication se traduit formellement par le redoublement, soit d'un lexème complet, soit d'une partie de celui-ci. Généralement, ces lexèmes redoublés n'affectent en rien leur catégorie d'appartenance en l'occurrence, la catégorie verbale. Celle-ci demeure identique, seul en est modifié le sémantisme. Dans bien des cas, la reduplication de ces verbes est liée, au plan du signifié, à la répétition de l'action:

2.1.1 La reduplication est totale

<i>ridi</i> 'taper, frapper'	<i>ridiridi</i> 'tapoter'
<i>kada</i> 'claquer'	<i>kadakada</i> 'bruissement, froissement'
<i>petra</i> 'bondir'	<i>petrapetra</i> 'bondir plusieurs fois'
<i>ie</i> 'dire'	<i>ieie</i> 'lire'

2.1.2 La reduplication est partielle

(a) une morphologie régulière

Il s'agit essentiellement du redoublement de la syllabe initiale:

<i>thapa</i> 'déchirer'	<i>thathapa</i> 'déchirer en morceaux'
<i>nara</i> 'tomber'	<i>nanara</i> 'tomber en cascade'
<i>thumi</i> 'secouer'	<i>thuthum</i> ¹ 'secouer pour faire tomber' (ex: les fruits), 'semer' (les graines)
<i>duni</i> 'sécher'	<i>dudun</i> ¹ 'sécher' (le linge)

¹ Objet étant considéré comme animé ou inanimé selon les cas.

(b) une morphologie irrégulière

Certains lexèmes se distinguent de ceux de la liste précédente par l'irrégularité morphologique de leur syllabe finale:

<i>shoshil</i> 'lancer quelque chose sur un objet ¹ '	<i>shoshot</i> 'lancer quelque chose sur des objets pour les faire tomber' (essentiellement les fruits)
<i>yose</i> 'prendre'	<i>yoyoc</i> 'prendre plusieurs objets'
<i>kuze</i> 'mordre, macher'	<i>kukuc</i> 'mordre plusieurs fois'
<i>weze</i> 'piétiner, écraser'	<i>wewel</i> 'piétiner plusieurs fois, plusieurs objets'

Ces deux formes de reduplication s'expliquent de la manière suivante. Quand l'une indique un mouvement progressif, le redoublement est total; quand l'autre traduit une répétition plus ou moins indéfinie de l'acte, alors la reduplication est partielle. Si dans les deux cas, il existe effectivement une forme fréquentative de l'action, la nuance sémantique qui les sépare est aussi à saisir. Dans le premier (la reduplication totale), la "progression" est considérée comme normale; quant au second (la reduplication partielle), la multiplication de l'acte se trouve accentuée non seulement par le caractère répétitif et intense de l'événement mais dûe aussi à la présence plurielle des actants (les compléments).

Mais la forme reduplicative ne constitue pas le seul aspect de la flexion du lexème verbal. La marque transitive en est aussi un autre.

2.2 Les marques formelles de la transitivité

Parmi ces lexèmes recensés précédemment, certains subissent d'autres types de flexion. Ils dépendent essentiellement de la nature des actants. Les flexions s'effectuent sans connaître une quelconque forme reduplicative. Tout se résume en fait au caractère transitif de ces lexèmes (il y a toujours la possibilité de transitiver des intransitifs).

2.2.1 Transitivité et intransitivité

Le lexème verbal est lié directement au phénomène de la transitivité et aux différents types de flexions prédicatives selon la catégorie de l'objet de complétion; animé ou inanimé, déterminé ou indéterminé.

(a) la valence verbale

Les changements de valence des verbes mis en évidence principalement de Tesnieres (1959) représentent l'aspect central des variations morphologiques du prédicat dans l'énoncé nengone. On sait – phénomène universel – que tout prédicat verbal se construit avec un certain nombre d'actants. Empruntons à la langue française les exemples suivants.

Ainsi 'dormir', identifié à un verbe intransitif, ne peut fonctionner qu'avec un seul actant (*je dors, le chat dort*); 'manger' comme verbe transitif peut disposer de deux actants (*je mange un gâteau, le chat mange une souris*) alors que 'écrire' considéré comme bitransitif a la possibilité de recourir à trois actants (*le père écrit une lettre à l'instituteur*).

(b) la transitivisation verbale: un phénomène d'augmentation actancielle

A côté des trois valences de base évoquées ci-dessus, chaque langue use néanmoins d'un procédé qui lui permette d'augmenter ou de réduire d'un actant la place d'un verbe et d'un énoncé (en français adjonction d'un actant par le verbe *faire*).

En Nengone, la transitivisation d'un lexème verbal se révèle comme un processus morphologique très présent voire fréquent. C'est la raison pour laquelle on peut dissocier les verbes intransitifs des verbes transitifs puisque les deux catégories s'inter-influencent, du moins pour les lexèmes polyfonctionnels (mais non ceux qui sont proprement programmés verbes).

2.2.2 *Lexèmes et variations formelles*

Les formes variées rencontrées dans la catégorie des verbes transitifs aident à comprendre comment les flexions s'effectuent au niveau de ces prédicats. Certains verbes demeurent invariables, quelle que soit la catégorie du deuxième actant.

(a) lexème de base à morphologie invariable

ie 'dire':

- (1) *Inu ci ie ore enengoco.*
je prés. dire dét. parole
'Je dis ce qu'il y a à dire.'

ule 'voir, regarder':

- (2) *Inu ci ule pailai.*
je prés. regarder chien
'Je regarde le chien.'

(b) lexème de base à morphologie variable

L'ensemble des lexèmes verbaux invariables paraît beaucoup plus limité que celui des lexèmes à morphologie variable.

Exemple de la dérivation prédicative:

shoshil → *shoshot*
yose → *yoyoc*

2.2.3 *Les trois formes de la transitivité*

(a) la forme déterminée

Nous venons de voir que certains lexèmes de base demeurent invariables au plan du signifiant et que d'autres au contraire subissent des variations. Cela résulte en fait du double aspect de la forme déterminée. Pour les premiers, le complément d'objet est omis formellement donc non obligatoire; pour les seconds, ce même objet est pré-déterminé par un suffixe de substitution:

- (3)a. *Inu ci ie.*
je prés. dire
'Je le dis [le message].'

- b. *Inu ci ule.*
je prés. regarder
'Je le regarde [le chien].'
- c. *Inu ci kaka-n.*
je prés. manger-dét.
'Je la mange [l'igname].'
- d. *Inu ci sia-n.*
je prés. envoyer-dét.
'Je l'envoie [la lettre, le garçon].'

(b) la forme indéterminée

On remarquera que les flexions lexicales sont fonction de plusieurs phénomènes soit phonologiques, soit sémantiques. A partir de la forme déterminée, nous obtenons ceci:

Lexème transitif terminé par une voyelle:

	Forme déterminée	Forme indéterminée	
flexion de deux voyelles	<i>ridi</i>	<i>rède</i>	'battre' (<i>rede mimi</i> 'battre du lait')
réduction syllabique	<i>beye</i>	<i>be</i>	'taper' (<i>be-ete</i> 'casser des pierres')
	<i>kini</i>	<i>ki</i>	'creuser' (<i>ki-kuru</i> 'creuser des trous')
	<i>rue</i>	<i>ru</i>	'faire' (<i>ru-kodraru</i> 'faire la cuisine')
	<i>cue</i>	<i>cu</i>	'accompagner' (<i>cu-ngome</i> 'amener des gens')

Lexème transitif terminé par une consonne:

Il est intéressant de noter par ailleurs une multiplicité de variations formelles de certains lexèmes transitifs à la forme indéterminée quand ceux-ci ont pour finale une consonne. Généralement, la chute de celle-ci marque la forme transitive indéterminée:

	Forme déterminée	Forme indéterminée	
chute du suffixe <i>-n</i> (rajout du <i>-n</i>)	<i>kua-n</i>	<i>kua</i>	'boire' (<i>kua wanu</i> 'boire du coco')
	<i>sia-n</i>	<i>sia</i>	'envoyer' (<i>sia tusi</i> 'envoyer une lettre')
	<i>ca-n</i>	<i>ca</i>	'planter' (<i>ca serei</i> 'planter des arbres')
présence de la voyelle harmonique <i>o</i>	<i>duo-n</i>	<i>duo</i>	'cultiver' (<i>duo-waud</i> 'cultiver du taro')
	<i>tuo-n</i>	<i>tuo</i>	'essayer' (<i>tuo-hnakokoe</i> 'essayer un linge')
chute du suffixe <i>-l</i>	<i>reu-l</i>	<i>re</i>	'brûler, griller' (<i>re-ware</i> 'griller des ignames')
	<i>ku-l</i>	<i>ku</i>	'râper' (<i>ku-wanu</i> 'râper un coco')
	<i>peu-l</i>	<i>peu</i>	'défricher' (<i>peu-toto</i> 'défricher le champ')

(c) la forme personnelle

Le deuxième actant ici, une modalité personnelle, a aussi une influence sur la marque flexionnelle du lexème transitif. Ainsi nous assistons aux variations suivantes:

Forme déterminée	Forme personnelle	
<i>kanon</i>	<i>kanu</i>	'donner' (<i>kanu bone</i> 'donner à lui')
<i>kuze</i>	<i>kuli</i>	'mordre' (<i>kuli bone</i> 'le mordre')
<i>koze</i>	<i>koli</i>	'couper' (<i>koli bone</i> 'le couper')

Il est évident que ces règles ne sont pas exhaustives, elles ne sont qu'indicatives et nous ont seulement permis de révéler quelques types de flexion.

Il arrive aussi que le jeu dialectique transitif/intransitif engendre d'autres types de flexion. C'est le cas notamment de la dérivation affixale.

3 La dérivation affixale

3.1 La suffixation

La suffixation de certains lexèmes verbaux est un phénomène très fréquent en Nengone. C'est un procédé qui consiste à dériver les verbes intransitifs en verbes transitifs. Au plan formel, le radical lexical est affecté des suffixes suivants.

-on, -ti:

<i>thaet</i> 'dormir'	<i>thaet-on</i> 'dormir sur quelque chose'
<i>wegel</i> 'veiller'	<i>wegel-on</i> 'veiller quelque chose' (ex: la nuit)
<i>hue</i> 'marcher, partir'	<i>hu-on</i> 'piétiner quelque chose'

Avec ces mêmes exemples, nous pouvons aussi suffixer *-ti*:

<i>thaet</i> 'dormir'	<i>thaeti-ti</i> 'dormir avec quelque chose' (ex: les chaussures)
<i>wegel</i> 'veiller'	<i>wegele-ti</i> 'veiller avec quelque chose' (ex: le magnétophone)
<i>hue</i> 'marcher, partir'	<i>hue-ti</i> 'partir avec'

ou encore:

<i>sere</i> 'se tenir debout, s'arrêter'	<i>sere-ti</i> 'se tenir debout avec'
--	---------------------------------------

(a) verbes d'emprunt

Tout verbe emprunté à la langue française subit le même traitement.

<i>preter</i> 'prêter'	<i>prete-on</i> 'prêter quelque chose'
<i>forcer</i>	<i>force-on</i> 'forcer quelqu'un ou quelque chose'
<i>expliquer</i>	<i>explique-on</i> 'expliquer quelque chose'
<i>savoir</i>	<i>savoir-on</i> 'savoir quelque chose'

(b) le pene iwateno (langage noble)

En Nengone, certains verbes du langage commun ont des correspondances en langage respectueux. On ne peut parler de suffixation mais simplement de changement de formes:

langage courant	langage noble
<i>ie</i> 'dire'	<i>beredr</i> 'dire'
<i>kaka</i> 'manger'	<i>kodraru</i> 'manger'
<i>hue</i> 'partir'	<i>leng</i> 'partir'

Nous noterons par ailleurs que la suffixation va servir aussi à faire passer d'un registre de langue (langage ordinaire) à un autre (langage respectueux):

<i>rue</i> 'faire'	<i>rue-ton</i>
<i>uan</i> 'penser, réfléchir'	<i>ua-ton</i>
<i>ran</i> 'compatir'	<i>ra-ton</i>

(c) le radical lexical se termine par une syllabe ouverte

Allongement de la voyelle finale + suffixe *-n*:

sans variation morphologique: *-a*, *-o*

<i>eleda</i> 's'amuser, jouer'	<i>eleda-n</i> 'jouer la pièce ou l'instrument en question'
<i>elo</i> 'maudir'	<i>elo-n</i> 'maudir quelqu'un'
<i>ua</i> 'penser'	<i>ua-n</i> 'penser à quelque chose'

avec variation morphologique: *-i*, *-u* + voyelle harmonique *o* + *-n*

<i>du</i> 'cultiver'	<i>du-o-n</i> 'cultiver quelque chose'
<i>menu</i> 'tromper' (se)	<i>menu-o-n</i> 'se tromper sur quelqu'un ou quelque chose'
<i>pareu</i> 'craindre'	<i>pareu-o-n</i> 'craindre quelqu'un ou quelque chose'
<i>hmi</i> 'prier, religion'	<i>hmi-o-n</i> 'benir quelque chose' (ex: le repas)
<i>didi</i> 'désirer'	<i>didi-o-n</i> 'désirer quelque chose'

Concernant certains lexèmes de base à voyelle *-i* ou *-e* en finale, la liste est très restreinte. Bon nombre de ceux-ci ne connaît aucune variation morphologique et reste indifférent à la forme déterminée ou indéterminée de l'énoncé.

Le radical lexical se termine par une syllabe fermée:

Nous retrouvons le suffixe *-n* précédé d'une voyelle harmonique. Généralement, il s'agit du *o* (voir précédemment):

<i>ruac</i> 'travailler'	<i>ruac-on</i> 'travailler quelque chose, s'en servir'
<i>beredr</i> 'parler en langage noble'	<i>beredr-on</i> 'parler sur quelque chose'
<i>thaet</i> 'dormir'	<i>thaet-on</i> 'dormir sur quelque chose'
<i>pul</i> 'discourir'	<i>pul-on</i> 'faire un discours sur quelque chose'

3.2 La préfixation

Nous identifions certaines formes de préfixes verbaux. Les morphèmes de causativité sont *a...ni*. Les causatifs sont considérés comme des formes particulières de transitivation. Effectivement, cette dérivation morphologique affecte la valence du prédicat. Cela va surtout

concerner les formes intransitives qui vont *se* transitiver. De monovalent (un seul actant), l'énoncé devient bivalent (deux actants) et peut concerner aussi bien les lexèmes verbaux statifs qu'actifs.

Lexèmes verbaux statifs:

<i>gada</i> 'blanc'	<i>a-gada-ni</i> 'blanchir qqe chose'
<i>uedr</i> 'malade'	<i>a-uedre-ni</i> 'rendre qqu'un malade'
<i>hma</i> 'grand'	<i>a-hma-ni</i> 'agrandir, célébrer'
<i>kapa</i> 'brisé, fendu'	<i>a-kapa-ni</i> 'briser, fendre'

Lexèmes verbaux actifs:

<i>nyanyad</i> 'courir'	<i>a-nyanyade-ni</i> 'faire courir'
<i>ruac</i> 'travailler'	<i>a-ruace-ni</i> 'faire travailler'
<i>era</i> 'chanter'	<i>a-era-ni</i> 'faire chanter'
<i>dede</i> 'voler' (dans l'espace)	<i>a-dede-ni</i> 'faire voler'
<i>thaet</i> 'dormir'	<i>a-thaeti-ni</i> 'endormir'

Dans les cas des verbes statifs, la forme causative est la traduction sémantique de "faire passer d'un état à un autre"; dans le second cas, il s'agit plus de "faire agir un premier actant sur un deuxième actant".

Les marques de la réciprocité sont:

e + prédicat:

<i>ridi</i> 'frapper'	<i>e-red</i> 'se battre' (le 2ème <i>e</i> résulte de l'assimilation du <i>i</i>)
<i>kedi</i> 'porter, soulever'	<i>e-ked</i> 'se rencontrer, se croiser'
<i>katra</i> 'réjouir, gai'	<i>e-katra</i> 'se congratuler, se réjouir'
<i>lewe</i> 'poursuivre'	<i>e-lewe</i> 'action de poursuivre ou d'être poursuivi'

i + prédicat:

<i>ule</i> 'regarder'	<i>i-ule</i> 'se regarder, flirter'
<i>cengenia</i> 'fâcher, être en colère'	<i>i-cengenia</i> 'se fâcher'

i comme changeur de catégorie:

<i>shici</i> 'serrer'	<i>i-shic</i> 'étroit, serré'
<i>wie</i> 'piquer'	<i>i-wi</i> 'piquant'

3.3 Affixes combinés

e...jeu:

<i>katra</i> 'réjouir, gai'	<i>e-katra-jeu</i> 'se congratuler, se réjouir entre eux'
<i>konekatu</i> 'aider'	<i>e-konekatu-jeu</i> 's'entraider mutuellement'
<i>pareu</i> 'craindre'	<i>e-pareu-jeu</i> 'se respecter mutuellement'

i...jeu:

<i>tusi</i> 'lettre, courrier'	<i>i-tusi-jeu</i> 's'écrire mutuellement'
<i>susu</i> 'vaniteux'	<i>i-susu-jeu</i> 's'afficher des prétentions amoureuses'

e...o:

<i>mane</i> 'pleurer'	<i>e-mane-o</i> 'se pleurer'
<i>taedrengi</i> 'écouter, entendre'	<i>e-taedrengi-o</i> 's'entendre'
<i>nengoc</i> 'parler'	<i>e-nengoc-o</i> 'discuter, converser'
<i>kai</i> 'appeler, interpeller'	<i>e-kai-o</i> 's'interpeller'
<i>roi</i> 'bon'	<i>e-roi-o</i> 'se réconcilier'

L'ensemble de ces exemples montre que ces affixes traduisent d'une certaine façon la réciprocité. Les nuances se situent au niveau du nombre de participants.

3.4 La marque causative

Elle se résume à la forme *a...ni* évoquée quelques lignes plus haut. Si d'une manière générale, elle s'applique assez facilement à tout lexème verbal de base, nous la retrouvons affixée aux formes dérivées par les marques de réciprocité. Pour l'ensemble des exemples vus ci-dessus, la marque causative est applicable. Mais il est beaucoup plus vrai dans les premiers cas car souvent utilisés. Les autres cas, quoique corrects en théorie, n'en sont pas moins attestés dans l'usage courant:

<i>katra</i> 'réjouir, gai'	<i>a-e-katra-ni</i> 'les rendre gais'
<i>ridi</i> 'frapper'	<i>a-e-rede-ni</i> 'inciter à se battre'
<i>ule</i> 'regarder'	<i>a-i-ule-ni</i> 'faire en sorte qu'ils flirtent'
<i>thubi</i> 'partager, diviser'	<i>a-i-thuba-ni</i> 'faire en sorte qu'ils se divisent'
<i>e-katra-jeu</i> 'se réjouir entre eux mutuellement'	<i>a-e-katra-jeu-ni</i> 'faire en sorte qu'ils se réjouissent mutuellement'
<i>i-tusi-jeu</i> 's'écrire mutuellement'	<i>a-i-tusi-jeu-ni</i> 'faire en sorte qu'ils s'écrivent mutuellement'

Voilà, très succinctement, ce que je voulais vous communiquer. J'espère seulement que certaines langues présentes ici, reconnaîtront certaines similitudes à travers les aspects morphologiques que je viens de vous exposer.

Référence

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Part 3
Central Pacific languages

13 *Two be's or not two be's? On the copulas of Wayan Fijian*

ANDREW PAWLEY

1 Introduction

This paper investigates the grammar and semantics of two copula forms in Wayan, a dialect of the Western Fijian language spoken on Waya and Viwa Island, in the Yasawa group, on the western fringe of the Fijian archipelago.¹

Regional linguistic diversification no doubt began in Fiji soon after the archipelago was first settled by bearers of the Lapita culture about 3,000 years ago. Today the diversity among Fijian speech traditions (well documented in Geraghty 1983) is not far short of that exhibited by the Romance group of Indo-European or by the Polynesian languages. The smallest named regional varieties within the Fijian group are often called 'communalects', a communalect being a regionally homogeneous speech tradition usually spoken by at most six or seven villages. There are perhaps 300 Fijian communalects. Diffusion within Fiji has made it hard to define discrete subgroups but there is general agreement that there are two main subgroups, Eastern and Western Fijian, with the boundary running roughly north-south down the centre of Viti Levu and to the west of Vanua Levu (Geraghty 1983; Pawley and Sayaba 1971; Schutz 1962). Each of these two subgroups consists of an extremely diverse dialect chain. Standard Fijian (also known as Bauan) belongs to the Eastern subgroup.

¹ For the Wayan data cited here I am particularly indebted to the late Timoci Sayaba and his daughters Adi Kelera Sayaba and Luisa Luveniyali. This paper is a byproduct of work on a Wayan-English dictionary that Timoci and I began many years ago. For valuable critical commentary on early drafts of this paper I thank Paul Geraghty, whose scepticism on certain points led me to rethink parts of the analysis, and to Robert Early and Alan Jones. Thanks are also due to those who offered comments at oral presentations of the paper, in particular, to Patrick Griffiths, and to Aubrey Parke, who provided some comparative data from western Viti Levu. The Wenner-Gren foundation and the New Zealand University Grants Committee supported fieldwork on the Wayan language, carried out at various times between 1967 and 1995.

Western Fijian communalects differ from most Eastern Fijian varieties, including Standard Fijian, in having at least one and usually two different words that mark an identifying or equational relation between subject and predicate nominals. In Wayan there are two such words: *tia* and *ni-*; these will be glossed 'be' in illustrative sentences.² In these and later examples the predicate nominal will be highlighted in bold type.

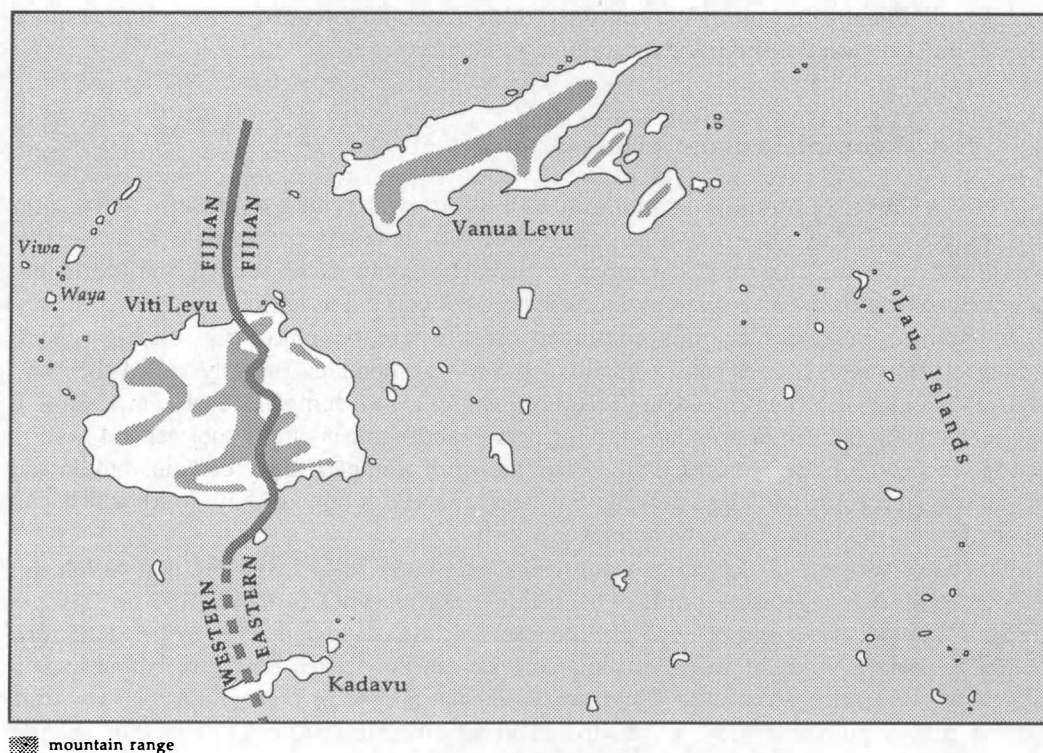
- (1) *Ei tam tia vūniwai o Esita, ei tia nasi.*
 3SG.NONPAST³ not be doctor PROP Esita 3SG.NONPAST be nurse
 'Esita is not a doctor, she's a nurse.'
- (2) *Ei tam ni-i Domisi, ei teni tamata.*
 3SG.NONPAST not be-PROP Domisi 3SG.NONPAST different person
 'It's not Domisi, it's a different person.'

There are no detailed published accounts of the grammar of *tia* and *ni-* or cognate forms in any Fijian communalect but a brief analysis is given by Geraghty (1983:231-233). He notes that reflexes of a reconstructed 'equational' marker **tia* (realised variously as *tia*, *te*, and *sa*) appear widely in the Western Fijian subgroup and also in Kadavu, and that nearly all Western communalects (but not those of Kadavu) have a second equational marker, *ni-*. Geraghty (1983:232) says that "What **tia* and *ni* do is to mark uniquely comments of nominal sentences"; *tia* is said to occur before common nominal comments, as in example (1), while *ni-* occurs before proper nominals, i.e. pronouns or proper nouns, as in (2).

² Cognates of *tia* and *ni-* are present in nearly all Western communalects and in Kadavu, Ono, Beqa and Deuba (Geraghty 1983:231-234 and pers. comm.). While the form *tia* is widespread and can be regarded as the proto-type, cognates take the form *te* in Nakoroboya, Magodro, and *sa* in Baravi and Tubaniwai. *ni-* has the mutation *ne-* in the Serua region, but elsewhere is generally *ni-*.

³ Abbreviations used in glossing examples:

Ø	zero morpheme (third singular subject)	OPT	optative mood
1	first person	PAST	past tense
2	second person	PF	perfective aspect
3	third person	PL	plural (more than a few)
COM	specific common noun marker	POSS	possessive
COMP	complementiser	PRO	pronoun
DL	dual	PROG	progressive aspect
EXC	exclusive	PROP	proper noun marker
FUT	future	RCP	reciprocal or plural subject marker
HYP	hypothetical	S	subject
INC	inclusive	SG	singular
NONPAST	non-past tense	TR	transitive suffix
NP	noun phrase	V	verb
O	direct object		



Map: Boundary of Eastern and Western Fijian subgroups

Geraghty's discussion indicates the following hypotheses about Western Fijian *tia* (and its phonological variants) and *ni*-:

- (i) Both forms mark comments, or new information, in topic-comment sentences.
- (ii) The two forms are functional equivalents, i.e. they have no other functions besides introducing a comment predicate.
- (iii) They are, syntactically, in complementary distribution, with *tia* marking common nominals and *ni*- proper nominals. One might treat the two copulas as suppletive forms, variant realisations of a single grammatical functor.
- (iv) *Tia* and *ni*- occur only in nominal sentences; therefore, neither element is a verb. However, doubt is cast on (iv) because Geraghty (1983:232) slips in the contradictory remark that *ni*- is perhaps best described as an "equational verb" and because sentences such as (1) and (2) carry distinctive features clearly identifying them as verbal constructions.

I do not wish to suggest that Geraghty still supports each of these hypotheses but at any rate they provided a useful point of departure for the present study. I will argue that hypothesis (i) is true of Wayan *tia* and *ni*-, but (ii) and (iv) are not true and (iii) is only half-true. Before we address these matters, however, it is necessary to summarise some relevant features of Wayan grammar.

2 Background notes on Wayan grammar

Like all Fijian languages, Wayan distinguishes sharply between verbal and nominal clauses and between transitive and intransitive verbal clauses.

2.1 Verbal complexes and clauses

Verbal clauses are transitive or intransitive. With a few exceptions, transitive verbs carry a transitive suffix of one of two general forms: *-Ci-* or *-Cakini-* (where *C* is a variable consonant or zero). There are a number of semantic contrasts associated with particular alternants of these transitive suffixes but these need not concern us here.

In intransitive clauses the normal constituent order (where the subject is a full NP) is Verb + Subject. However, clauses consist minimally of a verb complex (usually called the 'verb phrase' by Fijianists). In independent declarative clauses a verb complex consists at least of a subject pronoun (preverbal pronoun marking person-and-number of the subject) and a verb, acting as head of the construction. Often the verb complex also contains additional diagnostic free form particles marking, e.g. tense, aspect or mood. Any word which can stand alone as the head of a verb complex is a verb.

There are two sets of subject pronouns. One set shows fusion with the non-past tense-marker (originally a separate particle **i*), yielding portmanteau forms *qi* '1SG', *e* '2SG', *ei* '3SG', *ti* '1INC.DL', *eri* '1EXC.DL', etc. The other set (*qu* '1SG', *o* '2SG', *a* '3SG', *tu* '1INC.DL', *aru* '1EXC.DL', etc.) is used elsewhere, in some contexts marking a tenseless proposition and in other contexts marking past tense. Third person singular may be zero in certain contexts while second person pronouns may be omitted in imperative constructions. Zero third person pronouns in Wayan text are represented here by \emptyset .

- (3) *Ei na rewa na le-m vinā-ti-a.*
 3SG.NONPAST FUT possible COM POSS-2SG want-TR-3SG
 'What you want will be possible.' (lit. 'It will be possible your want-it.')
- (4) *A laka muni o Esita.*
 3SG.PAST go also PROP Esita.
 'Esita went too.'

Transitive clauses contain both a subject and a direct object. Although the preferred word order, for clauses with full NPs as core arguments, is VOS, the orders VSO and SOV are also common. Minimally, however, S and O consist of pronouns, with the subject pronoun always preceding and the object pronoun following the verb. The subject pronoun is retained even when there is a full NP subject. When the direct object is a common NP, the object pronoun is retained. The same applies to oblique case with human or higher animals referents. NPs. In these contexts the pronouns serve as determiners, marking the number and specificity of the coreferential NP, as in examples (5)–(7).

- (5) *Qu tola-vi-ra na driadria.*
 1SG.PAST see-TR-3PL COM child
 'I saw the children.' (lit. 'I saw-them the child.')
- (6) *Aru rairai garu-ti-a na ika na tui.*
 3DL.PAST probably smell-TR-3SG COM fish COM dog
 'The (two) dogs probably smelt the fish.' (lit. 'They-2 the dogs smelt-it the fish.')

- (7) *Aru vinā-ti-a na waqa o Lasa qa Manu.*
 3DL.PAST want-TR-3SG COM boat PROP Lasa and Manu
 'Lasa and Manu wanted the boat.' (lit. 'They-2 Lasa and Manu wanted-it
 the boat.')

All transitive verbs can be passivised by adding the prefix *lei-* while (usually) retaining the transitive suffix in the form *-Ci* or *-Caki* (see examples (44) and (48) below). The agent is not expressed in passive constructions.

Constructions with non-specific (generic) objects are considered intransitive. The verb in such constructions usually takes its intransitive form and the generic object noun is not preceded by a pronominal determiner or common noun marker; the noun acts as a modifier of the verb, as in example (8).

- (8) *Eri sā tali loga nō na alewa-sewa.*
 3DL PF.NONPAST weave mat PROG COM woman-little
 'The girls are weaving mats.' (lit. 'The girls are mat-weaving.')

2.2 Existential verbs

Existential verbs, as distinct from copulas, are one-place predicates used to assert the existence (or non-existence) of something. Existential verbs often contain more additional elements of meaning, such as location, or a certain posture, duration, or shape and size. Wayan has several one-place verbs that have claims to be called existential. These include *tau*¹ 'exist, be present', *tau*² 'be placed, positioned, situated', *nō* 'stay, sit, reside', *tū* 'stand, be situated (permanently)', and *vō* 'remain, be left over'. There are also negative and quasi-negative existentials: *lala* 'not exist, be none', *vele* 'be absent, disappear'. Some of these verbs are exemplified below.

- (9) *Ei tau na kalou.*
 3SG.NONPAST exist COM god
 'God exists.'/'There is a God.'
- (10) *Ei tau vata na le-dru were.*
 3SG.NONPAST placed together COM POSS-3DL house
 'Their houses are situated together.'
- (11) *Eri sewa na tamata eri nō doki i anuanu?*
 3DL.NONPAST some COM person 3DL.NONPAST stay lie on island
 'Are there any people living on the island?'
- (12) *Ei lala o tama-ya.*
 3SG.NONPAST not.exist PROP father-3SG.POSS
 'He has no father.' (lit. 'He/it does not exist, his father.')

2.3 Nominal constructions

Noun phrases are either proper or common. Proper noun phrases, which name unique individuals or places, are by definition definite. They consist minimally of the elements: proper article + head. The proper article (i.e. proper noun marker) takes the form *i* or zero immediately after a transitive verb; elsewhere it is either *o* or *ko*. The head of a proper

phrase may consist of the interrogative *ei* 'who?', an independent pronoun, a personal or place name, or a kinship term.

Common nouns may be definite or indefinite. Indefinite nouns may be specific or generic. In most contexts common nouns are preceded by the article *na*, which according to most Fijianists simply marks the noun as common and is neutral as to its definiteness.⁴ Definite phrases usually consist minimally of *na* + noun preceded by a pronoun marking person-and-number, where the pronoun serves as a determiner or indexing element, as in examples (5)–(7) above and (13)–(14).

- (13) *I vei o kora na driadria?*
 at where PROP 3PL COM child
 'Where are the children?'

- (14) *Cō-vi-ra na driadria.*
 call-TR-3PL COM child
 'Call the children.'

Specific noun phrases consist minimally of the elements: common noun marker + noun. Often, however, the first element is a quantifier phrase. A quantifier phrase usually consists of a third person pronoun (sometimes zero) and tense-aspect-mood marker (often merged with the pronoun) plus a numeral or other quantifier, e.g. *lia* 'one', *rua* 'two', *sewa* 'some'. Generic noun phrases are unmarked (carry no common noun marker or pronoun).

Quantifier bases are a subclass of intransitive verbs with some eccentric properties. They typically follow elements distinctive of verb phrases, namely preverbal subject pronouns and tense-aspect-mood markers. If a quantifier verb is the head of a clause, as in (15), then the clause is classified as verbal:

- (15) *Ei rua boto na ika.*
 3SG.NONPAST two only COM fish
 'There are only two fish.'

However, when a quantifier phrase modifies a noun phrase, as in examples (15) and (16), the sequence quantifier phrase + noun phrase functions as an indefinite noun phrase:

- (16) *Aru kau ati a sewa na ika.*
 3DL.PAST carry thither 3SG.PAST some COM fish
 'They (2) took some fish.'

Nominal clauses consist of two juxtaposed noun phrases, one of which typically provides old information, the other new, so that we can speak of a subject-predicate or topic-comment relation. Two types of nominal clauses may be distinguished according to the semantic relationship holding between the NPs. In one type the relationship is *equational*, in that what is asserted (or questioned) is identity of reference between the two NPs. In this type the NPs

⁴ Writers on Standard Fijian and other varieties of Fijian usually regard the common article as neutral with regard to definiteness of the noun phrase (Arms 1974:61–63; Dixon 1988:114; Milner 1972). A different view is taken by Schutz (1982), who argues that in Standard Fijian, before a common noun, there is a contrast between *na*, which marks the noun as definite, and the absence of a marker, which indicates that the noun is generic. He proposes that adding *e dua na* 'one', before a *na* phrase does not make that phrase indefinite, but rather makes a definite phrase more general.

may occur in either order – subject-predicate or predicate-subject – although the preferred order is subject-predicate. The subject-predicate contrast can be identified by features of intonation.

- (17) *O mna-iau o Lani.*
 PROP mother-1SG.POSS PROP Lani
 'My mother is Lani.'
- (18) *O koya o tama-dru.*
 PROP 3SG PROP father-3DL.POSS
 'He is their father.'

In the interrogative form of an equational nominal construction, however, the order is almost always subject-predicate:

- (19) *O ei o mna-m?*
 PROP who PROP mother-2SG.POSS
 'Who is your mother?'

In the second type the predicate nominal is a non-specific NP which identifies the subject by naming its class.

- (20) *O Nomani na vāvālagi vinā.*
 PROP Nomani COM European good
 'Nomani (Norman) is a good European.'

The class-membership relation may be emphasised by formulating the predicate as an indefinite noun phrase with a numeral, as in:

- (21) *Ei lia na alewa vinā o mna-m.*
 3SG.NONPAST one COM woman good PROP mother-2SG.POSS
 'Your mother is a good woman.'

A still more emphatic assertion of the class-membership relation can be achieved by adding the modifier *mataqali* 'kind, sort' before the noun:

- (22) *O Noma ei lia na mataqali vāvālagi vinā.*
 PROP Noma 3SG.NONPAST one COM type European good
 'Norma is a good sort of European.'

3 Wayan *tia* and *ni-*

3.1 On copulas

Wayan has other clause types that do not fit the major types of verbal and nominal construction referred to here. Among these are clauses formed with *tia* and *ni-*, which are two place predicates belonging, or allied to the family of elements known as 'copulas'.

In his extensive study of non-verbal predication, Hengeveld (1992:32) describes a copula as a semantically empty form that links a subject NP with a non-verbal predicate that says what the subject is, identifying or characterising it in some way. Copulas may be non-verbal but are often realised as dummy verbs, which carry verbal inflections such as tense, aspect or mood, but otherwise make no independent contribution to the meaning of a sentence, e.g. English 'be' in *Peter is President*, *John is a farmer*, *Millie is charming*. Hengeveld (1992:32)

argues that “the shades of meaning often attributed to a copula can be traced back to other characteristics of the sentence, such as the nature of the non-verbal predicate and its arguments”.

Elements that have some of the qualities of copulas are known as ‘quasi-copulas’ or ‘semi-copulas’. They are often verbs that have some independent meaning of an aspectual, modal or perceptual sort, e.g. *become*, *remain*, *prove*, *seem*, *stand*, *taste*, or Spanish *ser* and *estar*, but which otherwise enable a nonverbal lexeme or phrase to act as a main predicate, as in examples (23) and (24).

(23) *The young soldier became/proved/seemed/stood/remained a hero.*

(24) *It seemed/stood/tasted/became firm.*

Let us now look more closely at the properties of *tia* and *ni-* constructions. In discussing these, I will use the terms ‘topic’ interchangeably with ‘subject’ and ‘comment’ interchangeably with ‘predicate nominal’

3.2 *tia* constructions

Tia requires two arguments, call them X and Y, and links them in a classifying or class-membership relationship, where X denotes the member and Y the class. All *tia* constructions ask or presuppose the question ‘What (kind of thing) is X?’ or make (or deny) the assertion ‘X is a (kind of) Y’.⁵ The question can be framed using *tia* and the common noun interrogative *ava*:

(25) *Ei tia ava?*
3SG.NONPAST be what
‘What (kind of thing) is it?’

An appropriate answer to (25) might be any of the following:

(26) *Ei tia kwā vinā.*
3SG.NONPAST be thing good
‘It’s a good thing.’

(27) *Ei tam tia moko, ei tia vokai.*
3SG.NONPAST not be small.lizard 3SG.NONPAST be iguana
‘It is not a lizard, it’s an iguana.’

(28) *Ei rairai tia kucuve ei vesaru nō i*
3SG.NONPAST appears be rat 3SG.NONPAST scratch PROG in
na kovate.
COM cupboard
‘It’s probably a rat scratching in the cupboard.’

⁵ The ‘kind’ meaning is implicit. There is a term for ‘kind’ or ‘sort’, namely *mataqali*, and one can use this to ask explicitly ‘What kind of thing is X?’, using a nominal construction:

Na mataqali ika ava na ika sōkwē?
COM kind fish what COM fish that
‘What sort of fish is that fish?’

Constituent X is the grammatical subject or topic and represents old or assumed information, the thing talked about. X is always definite, consisting of a pronoun, a proper noun or a definite common noun phrase. The pronoun may be any person. Y is the predicate nominal or comment, giving information about the topic. Y is always an unmarked common nominal (never an adjective, adverb or proper noun. (Here 'unmarked' refers to the absence of a prenominal determiner indicating specificity, definiteness or number.) The word *tia* takes the predicate nominal as its complement.

To the question in (29):

- (29) *O sã tia ava (o iko)?*
 2SG.PAST PF be what PROP 2SG
 'What were you?'

(where the topic is represented both by a preverbal pronoun *e* and by a noun phrase containing an optional independent pronoun *iko*, which adds emphasis) an appropriate answer might be either (30) or (31):

- (30) *Qu sã tia idinia.*
 1SG.NONPAST PF be engineer
 'I was an engineer.'
- (31) *A sui-ti-i au me qu tia kaisi.*
 3SG.PAST swear-TR-PROP me COMP 1SG be bastard
 'He called me a bastard' (lit. 'He swore (at) me that I am a bastard.')

To the question in (32):

- (32) *E tia ava ivu-ā?*
 2SG.NONPAST be what to-3SG
 'What are you to her?'

which asks for information about how the addressee (the topic) is related to a certain third person, an appropriate answer is one that specifies a kind of kinship relation, as in (33):

- (33) *Qi tia alewa ivu-ā, eri vi-gwaneni.*
 1SG.NONPAST be female to-3SG 1EXC.DL.NONPAST RCP-cross.sibling
 'I am (a) sister to him, we are brother and sister.'

Examples (25)–(33) all have as topic a preverbal subject pronoun. However, the topic can be a full NP:

- (34) *Sã ∅ tia ivakacola balavu na ōcoi.*
 PF 3SG be life-preserver long COM idleness
 'Idleness is a life-preserver.'/'Idleness makes for a long life.'
- (35) *Sã ∅ tia mate ni tūqwaqwa na sasala.*
 PF 3SG be sickness of old.age COM arthritis
 'Arthritis is an affliction of old age.'
- (36) *Sã ∅ tia tamata na qē kwē.*
 PF 3SG be live.egg COM egg this
 'This is a live egg.'/'This egg has live young (in it).'

The topic NP usually follows the comment but may be placed first in order to highlight it. This fronting seems to be common when the topic is a heavy noun phrase, such as a clause or nominalisation that describes an event or situation whose agent is in question.

- (37) *Na vula i samasama sã ø tia gauna ni ākeli.*
 COM month of yellowing.leaves PF 3SG be time for harvesting
 'The dry season is the time to harvest wild yams.'
- (38) *Ne itaba were ei na tara-a,*
 COM kind house 3SG.NONPAST FUT make-3SG
ei sã tia were ni cagilaba.
 3SG.NONPAST PF be house for hurricane
 'The type of house he will build, will be a house for hurricane conditions.'
- (39) *Na tara-a ni cakacaka kwē sã ø tia iseva ni tuba.*
 COM do-3SG of work this PF 3SG be key of door
 'Doing this work is a key to the door (of success).'

For some *tia* constructions introduced by the complementiser *me*, or *me lai* an appropriate English translation is 'X becomes/ends up as/results in a Y'. In such cases the verb taking the *tia* clause as complement is usually *aco* 'arrive, happen'.

- (40) *Ei na aco me ø la-i tia matanibose o Inoke.*
 3SG.NONPAST FUT arrive COMP 3SG go-to be representative PROP Inoke
 'Inoke will end up being a (parliamentary) representative.'
- (41) *Aru sã sema-vata na drā ni alewa qa ni tagwane*
 3DL PF join-together COM blood of woman and of man
sã ø aco me ø tia tamata.
 PF 3SG arrive COMP 3SG be human.being
 'When the blood of a female and a male mix it results in a human being.'

x is for a y

Virtually all the examples considered so far can be translated into English as 'X is a Y'. However, there are many cases where the comment classifies the topic by naming its use: 'X is to be used as a Y' or 'X is for Y'. This purposive use is most often (but by no means exclusively) associated with the preverbal particle *me*, the irrealis complementiser, as in examples (42)–(44), or *me* plus the auxiliary *la-i* 'go to, go in order to', as in (45). The topic of the *tia* clause is often the subject of a verb in a higher clause, as in:

- (42) *Na aqona ei vakaagataki me ø tia icō*
 COM kava 3SG.NONPAST used COMP 3SG be invocation
ni alo.
 for spirits
 'Kava is to be used as an invocation to the spirits.'
- (43) *Vakaaga-takini-a na bitu me ø tia ise.*
 use-TR-it COM bamboo COMP 3SG be knife
 'Use the bamboo for/as a knife.'

- (44) *Sā* \emptyset *lei-letaki* *ne* *ilavo* *ni* *werenivola*,
 PF 3SG PASS-diverted COM money for library
me \emptyset *la-i* *tia* *bure*.
 COMP 3SG go-to be dormitory
 'The money for a library has been diverted, (to be used) for a dormitory.'
- (45) *Kau* *sewa mai* *na* *uga* *me* \emptyset *la-i* *tia* *bē*.
 carry some hither COM hermit.crab COMP 3SG go-to be bait
 'Bring some hermit crabs for bait.'

The difference between the 'X is a Y' and 'X is for Y' interpretations does not reflect a difference in the function of *tia* itself. It is attributable instead to the accompanying tense-aspect and auxiliary markers, or, in some cases, to cultural knowledge shared by the Wayan speech community. For example, in (46) the 'is for' reading for each of the *tia* clauses depends on knowing that *benu* can refer not only to a feast ending a widow's period of wearing mourning clothes but also to a gift of food contributed to such a feast, and that a pig is an appropriate donation to the feast.

- (46) *Ei* *tia* *ava* *na* *qō* *eki?* – *Ei* *tia*
 3SG.NONPAST be what COM pig that 3SG.NONPAST be
benu.
 food.for.mourning.feast.
 'What is this pig (for)?' – 'It is for a feast ending a widow's mourning.'

The question simply asks 'What is this pig? The answer shows that the question has been given a purposive reading.

Can the predicate nominal be referential?

The predicate nominal in a *tia* construction always lacks a determiner or common noun marker. Now, in canonical verbal clauses when there is no determiner (a pronoun or specific common noun marker) before a common noun that directly follows a verb, that noun is marked as non-referential. However, it is well known that, in various languages, the parameters of referentiality (definiteness, specificity, coreference) that apply to normal arguments do not readily apply to predicate nominals. So it may be unwise to take the absence of a determiner before the predicate nominal in a *tia* clause as strong evidence that the nominal is non-referential.

Having entered that caveat, it does seem that in *tia* constructions the comment is always understood as being non-referential. In examples (1) and (25)–(46) the comment tells us that the topic is (is not, or may be) a certain kind of thing but it does not identify a particular referent.

In some cases, the predicate nominal may on first reading seem to refer to a unique or specific entity, as in examples (47)–(49).

- (47) *Magā* *qu* *kē* *tia* *Tui* *qu* *na* *kē* *boco-ni-a*
 if 1SG HYP be king 1SG FUT.HYP extinguish-TR-3SG
vakalia *na* *sol* *ivakacavacava*.
 for.ever COM give taxes.
 'If I were King I would abolish taxes for ever.'

- (48) A *lei-tara sila na masu qa qei ø tia*
 3SG.PAST PASS-do first COM prayer and then 3SG be
vunau i takū.
 sermon at after
 'A prayer was said first, then afterwards there was a sermon.'
- (49) A *tia ikatolu o Manasa i na wavu.*
 3SG.PAST be third.one PROP Tui in COM race
 'Manasa came third (was the third one) in the race.'
 (Here *ikatolu* is a common noun, 'third one'.)

However, on reflection it can be seen that this is not really the case. The king in (47) is a hypothetical king. The sermon in (48) is a generic notion, a standard event in a church service, and in (49) a similar interpretation is available for the positions in a race.

Is *tia* a verb?

The word *tia* appears to be a true copula in that its meaning can be described as relational rather than lexical. Its only function is to mark a class-inclusion relation between predicate and subject nominals.

If *tia* is a copula, what part of speech is it? The clauses which *tia* occurs in are, plainly, verbal. Invariably *tia* is preceded by an element which is diagnostic of a verb complex, such as a preverbal subject pronoun, or a tense, aspect or mood marker, or the preverbal negator *tam* 'not'. It is true that *tia* does not meet the first test of verbness: being able to stand alone as the head of the verb complex. It requires a partner, the predicate nominal, but this is consistent with its use as a copula. Together, the partners function as a verb.

Tia and its predicate nominal constitute an inseparable unit within the verb complex. That is to say, the predicate nominal always directly follows *tia*, and precedes any postverbal modifiers that occur within the verb complex. The *tia* + predicate nominal unit can take the same range of postverbal modifiers as typical verbs do, e.g. the directional makers *ati* 'thither, towards a goal' and *mai* 'towards speaker', the aspect marker *nō* 'progressive' and the oblique case anaphor *kā* 'thereat, thereby, therewith, etc.', as in:

- (50) *M-o tia idinia ati.*
 OPT-2SG be engineer thither
 'You should go on being an engineer.'
- (51) *Sā tia idinia cakacā mai.*
 PF be engineer bad hither
 'He's getting to be a bad engineer.'
- (52) *Ei tia asala nō ni le-dru were na velau.*
 3SG.NONPAST be ridgepole PROG of POSS-3DL house the ironwood
 'The ironwood is (serving as) the ridgepole of their house.'
- (53) *Na gauna o si tia bete kā.*
 COM time 2SG.PAST still be priest thereat
 'At the time when you were still a priest.'

There appears to be one other particle in Wayan whose use shows some degree of likeness to *tia*. The particle *teni* 'different, other, strange' can immediately follow a subject pronoun

only when partnered by a following noun. It marks the following noun as a predicate referring to an entity that is not the one expected, or as one that is not familiar.

- (54) *Ei teni tamata, ei tam ni-i Domisi.*
 3SG.NONPAST different person 3SG.NONPAST not be-PROP Domisi
 'It's a different person/a stranger, it's not Domisi.'

- (55) *Ei rairai teni ika.*
 3SG.NONPAST seem other fish.'
 It seems to be a different fish/a strange fish.'

However, the *teni* + noun sequence is less verb-like than *tia* + noun. As far as I know, it cannot occur with the same range of postverbal modifiers, e.g. *mai*, *ati*, *kā* and *nō*, as *tia* can.

3.2 *ni*- constructions

Ni- constructions resemble *tia* constructions (i) in having a subject (or topic) which represents given or assumed information and (ii) in having a predicate nominal (or comment) which adds new information. However, they differ from *tia* constructions in being fully equational, i.e. the subject X and the predicate Y refer to the same particular entity. Typically *ni*- constructions consist of the question 'X is who/which one?' or 'X is the what?', or, presupposing such a question, assert that 'X is So-and-so' or 'X is the such-and-such'.

There are certain additional properties of *ni*- clauses which distinguish them from *tia* clauses: (a) The predicate nominal must be definite. (b) The predicate nominal can be proper as well as common. (c) The first element in a common predicate nominal must be a pronominal suffix, drawn from the set that marks direct object of transitive verbs. (d) The predicate nominal can consist of a pronoun alone, of any person. (e) The subject nominal cannot be a first or second person pronoun; it can only be a noun or a third person pronoun. Arguably, property (b) follows from the coreferentiality requirement.

Predicate nominals consisting of a proper noun phrase

When the predicate nominal is a proper noun or personal pronoun it is incorporated into the verb complex. Example (56) describes a misidentification:

- (56) *A sētava o Nasi me kē ni-i Mosese*
 3SG.PAST mistake PROP Nurse COMP HYP be-PROP Mosese
o Veresa.
 PROP Veresa
 'Nurse mistook Veresa for Mosese.'/'Nurse wrongly took Veresa to be Mosese.'

Example (57) denies that person X and person Y are identical:

- (57) *Ei tam ni-i Luisa na alewa sōkwē.*
 3SG.NONPAST not be-PROP Luisa COM woman that
 'That woman is not Luisa.'

Predicate nominals consisting of a common noun phrase

In examples (58)–(62) the predicate nominal is a common noun phrase. In common predicate nominals the first element is invariably a pronominal suffix, marking the number of the nominal.

- (58) *Ei tam ni-a le-qiau ne ilavo.*
 3SG.NONPAST not be-3SG POSS-1SG COM money
 'The money is not mine.'
- (59) *Ei rairai ni-ru na vūnivola*
 3SG.NONPAST seems be-3DL COM clerk
aru driva-ti-a ne ilavo.
 3DL steal-TR-3SG COM money
 'It seems that it was the clerks who stole the money.'
- (60) *Sā ni-ru ē na alewa ei vinā-ti-a vali.*
 PF be-3DL those COM woman 3SG.NONPAST want-TR-3SG around
 'The women he fancies are those (2).'
- (61) *Sā ∅ ni-a kwē e mata.*
 PF 3SG be-3SG this 3SG eye
 'This is its eye.' or 'Its eye is this one.'
- (62) *Sā ∅ ni-a sōkwē na lea were o Kini.*
 PF 3SG be-3SG that COM her house PROP Kini
 'That one is Kini's house.' OR 'Kini's house is that one.'

When the predicate nominal is a common noun phrase, the head noun and its marker *na* stand outside the verb complex, forming a separate phrase. In these respects the predicate nominal of *ni-* patterns exactly like a direct object of a transitive verb. The kinds of material that may intervene between *ni-* and its predicate nominal include postverbal modifiers and the subject noun phrase. In examples (63) and (64), respectively, the intervening material consists of the postverbal modifiers *nō magā* 'still continuing' and *boto* 'only'.

- (63) *E si ni-a nō magā ne itūtū.*
 3SG.NONPAST still be-3SG PROG still COM situation
 'The situation is still the same.' OR 'There's been no change in the situation.'
- (64) *Sā lala na ika, sā ∅ ni-a boto e saumomo!*
 PF none COM fish PF 3SG be-3SG only 3SG bones
 'The fish is all gone, there's only the bones (left)!'

In (65) the subject nominal, *e aca mai Viwa* 'its name in Viwa', intervenes.

- (65) *Na sam, ei ni-a e aca mai Viwa*
 COM seaslug 3SG.NONPAST be-3SG 3SG.POSS name at Viwa
na bosucu ni waitaci.
 COM slug of sea
 'The sea-hare, its name at Viwa is the sea-slug.'

Because either a subject or a predicate common noun phrase may directly follow the verb, it is sometimes hard to determine which is the subject and which is the predicate nominal of a

ni- clause. In the case of (66), for example, this uncertainty is reflected in the alternative translations (a) and (b) given below.

- (66) *O kora na rōroro ei ni-a dra aca na lā ua.*
 PROP they COM fishers 3SG.NONPAST be-it 3PL name COM leg wave
 (a) 'Those who fish, their name is 'surf-legs'.
 (b) 'Those who fish, 'surf-legs' is their name.'

Predicate nominals consisting of a pronominal suffix

In examples (67)–(69) the predicate nominal consists simply of a pronominal suffix, which is incorporated in the verb complex. The set of pronominal suffixes that follows *ni*- is identical to the 'object' pronoun set that follows transitive verbs.

- (67) *Sā ∅ ni-ko!*
 PF 3SG be-2SG
 'You are the one!' OR 'It is you!'
- (68) *Sā ∅ ni-ru!*
 PF 3SG be-3DL
 'They are the ones (now)!'
- (69) *Sā ni-a dū na kwā qi cakacā-ti-a.*
 PF be-3SG truly COM thing I hate-TR-3SG
 'That's the thing I really hate.' (OR 'The thing I really hate is that one.')
- (70) *A ni-au na bete sōkwē!*
 3SG.PAST be-1SG COM priest that
 'That priest was me!'

Predicate nominals consisting of a possessed kinship term

Wayan kinship terms, when they have definite reference, share some grammatical properties with proper nouns and others properties with common nouns.

Kinship terms resemble common nouns in that they can take a definite possessive modifier. In fact, kinship terms referring to a particular individual must be possessed in this way in *ni*- constructions. To ask 'How are you related to So-and-so?' Wayans typically say 'So-and-so is your what?'. The interrogative pronoun is treated as a kinship term taking the preposed possessive pronoun typical of part-whole possession and of one subclass of kinship terms, as in:

- (71) *Ei ni-a m ava o Taina?*
 3SG.NONPAST be-3SG your what PROP Taina
 'Taina is your what?' (i.e. 'What relation is Taina to you?')

Most kinship terms resemble proper nouns in that they take the proper article *o* or *i*, rather than a common article, and in that they do not take a pronominal determiner. Thus:

- (72) *Ei ni-i mna-iau o Taina.*
 3SG.NONPAST be-PROP mother-1SG.POSS PROP Mere
 'Taina is my mother.'

- (73) *Ei ni-i tubu-dru o Voli.*
 3SG.NONPAST be-PROP grandparent-3DL.POSS PROP Voli
 'Voli is *their* grandfather.'

If the assertion is 'My mother is *Taina*', with *Taina* as new information, it should be expressed with *Taina* as the predicate nominal:

- (74) *Ei ni-i Taina o mna-m.*
 3SG.NONPAST be-PROP Taina PROP mother-2SG.POSS
 'Your mother is *Taina*.'

In passing we may note that when the predicate noun is proper it may be presented in either of two ways. It may be integrated into the noun phrase directly governed by *ni-*, in which case the proper noun marker is *-i*, cliticised to the verb, and the kinship noun plus its possessive pronoun directly follows the verb, as in examples (72)–(74). The alternative is exemplified by (75) and (76). Here the noun appears as part of an appositive proper noun phrase, introduced by the independent form of the proper article *o*, or by zero in the case of a few kinship terms that take a preposed possessive pronoun. The noun phrase stands in apposition to a coreferential pronoun which is governed by *ni-*.

- (75) *Ei ni-ru o tubu-dru o Voli.*
 3SG.NONPAST be-3DL PROP grandparent-3DL.POSS PROP Voli
 'Voli is their grandfather.' ('Voli is to them, grandfather.')
- (76) *A tata-ni-i Nari me ø ni-a e lewe.*
 3SG.PAST speak-TR-PROP Nari COMP 3SG be-3SG 3SG spouse
 'He asked Nari to be his wife.'

3.3 Minimal pairs for *tia* and *ni-*

Crucial evidence for functional contrast between *tia* and *ni-* is the presence of pairs of sentences, with the same lexical content and syntactic structure, differing only in the form of the copula and its obligatory grammatical correlates. The a and b pairs in examples (77)–(78) fit the bill. As I understand it, the contrast in each pair is between a non-specific and a definite predicate nominal.

- (77)a. *Ei tia qasenivuli o Sailasa.*
 3SG.NONPAST be priest PROP Tevita
 'Sailasa is a teacher.'
- b. *Ei ni-a na qasenivuli o Tevita.*
 3SG.NONPAST be-3SG COM priest PROP Tevita
 'Sailasa is the teacher.'
- (78)a. *O setava-takini-i Risi me tia bete.*
 2SG.PAST mistake-TR-3SG Rhys COMP be priest
 'You mistook Rhys for a priest.'
- b. *O setava-takini-i Risi me ø ni-a na bete.*
 2SG.PAST mistake-TR-PROP Rhys COMP 3SG be-3SG COM priest
 'You mistook Rhys for the priest.' (lit. 'You mistook Rhys that he is the priest.')

4 Conclusions

Wayan *tia* and *ni*- constructions resemble each other in being verbal clauses in which the copula marks some sort of identifying relation between topic and comment nominal.⁶ Both construction types require a definite nominal as subject. However, there are several differences between them, including the following:

- (i) The two verbs are not functional equivalents. *Tia* marks a class-membership relation between subject and predicate nominals. It introduces a non-referential predicate nominal, which characterises the topic as being a certain kind of thing. By contrast, *ni*- marks an equational relation. It introduces a predicate nominal that is definite and coreferential with the subject nominal.
- (ii) A *tia* predicate nominal must be a common noun. (This constraint is a corollary of the fact that *tia* marks a taxonomic or 'kind-of' relationship between subject and predicate nominals.) A *ni*- predicate nominal can be either proper or common. (This is a corollary of the fact that *ni*- equates two specific or definite entities.)
- (iii) *Tia* and its predicate nominal make up an inseparable unit within the verb complex. By contrast, *ni*- is not so closely bound to its predicate nominal when that nominal is common. Other postverbal modifiers and even other adjuncts may intervene between *ni*- and the nominal. However, the pronominal determiner of the nominal must be attached directly to *ni*-. In these respects *ni*- and its predicate nominal behave exactly like a transitive verb.

The origins of these two copula forms are uncertain. *Tia* may be cognate with Standard Fijian *dua* 'one', both of which possibly come from early Oceanic **tia*, **tea* or **tua*, which has been reconstructed as either a numeral 'one' or a marker of indefiniteness (Pawley 1972:52). *Ni*- may derive from certain of the uses of the early Oceanic verbal suffix **-ni*-, which derived transitive verbs when added to the applicative suffix **-Caki(ni)*- (Evans n.d.) and which still has this function in Wayan. Copular *ni*- has certain morphosyntactic characteristics which seem to be relics of its earlier association with transitivity **-ni*-. In

⁶ Wayan has purely nominal clauses (see §2.3 and note 4) which cover a range of functions similar to *tia* and *ni*- clauses. A *tia* clause may be paraphrased by a nominal clause in which the predicate nominal is a common noun, introduced by the common noun marker *na*:

O Noma na nasi vinā.
 PROP Noma COM nurse good
 'Norma is a good nurse.'

A paraphrase that more emphatically expresses the class-membership relation is achieved by adding the modifier *mataqali* 'kind, sort' before the noun, and reinforced by putting a quantifier phrase at the beginning of the predicate.

O Noma ei lia na mataqali nasi vinā.
 PROP Noma 3SG.NONPAST one COM type European good
 'Norma is a good sort of nurse.'

A *ni*- clause may be paraphrased by juxtaposing two definite nominals.

O koya o tama-dru.
 PROP 3SG PROP father-3DL.POSS
 'He is their father.'

Whether there are subtle semantic and pragmatic differences between the copular and nominal constructions remains a matter for future study. My impression is that Wayan speakers use *tia* and *ni*- constructions more often than their nominal equivalents.

particular, copular *ni-* requires the predicate nominal to begin with, or consist of a pronoun, and that pronoun has the same form as the pronominal suffixes that mark direct objects of transitive verbs: *-a*, *-ru*, etc.

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14 *The dialects of the Yasawa Islands of Fiji*

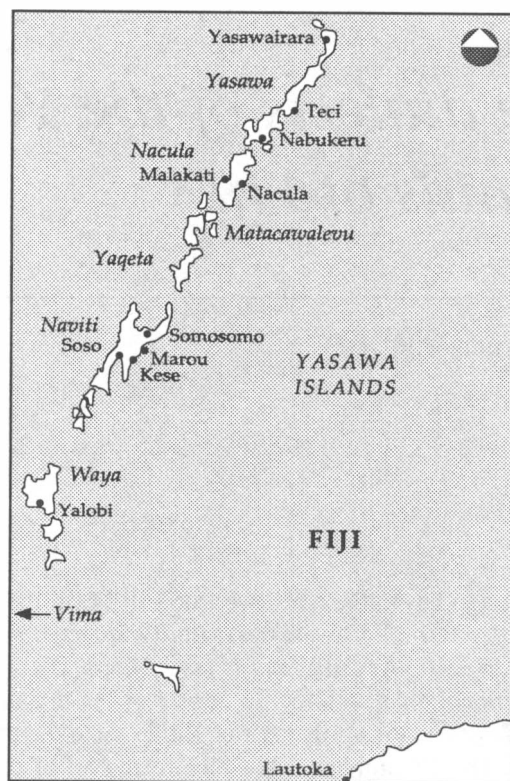
GERALDINE TRIFFITT

1 Introduction

The Yasawa archipelago lies to the north-west of Viti Levu, the most populous island of Fiji. There are 25 villages in the Yasawas; the majority are situated on the larger islands of Naviti (7), Yasawa (6), Nacula (4) and Waya (4) (see Map). The inhabitants of most of the islands have close traditional links with the Ba district of the mainland, and like other areas west of a divide from Tavua on the north coast of Viti Levu to the mouth of the Navua River in the south, speak a series of communalects which form part of the larger dialect complex known as Western Fijian.

This paper examines the extent of linguistic variation among the Yasawa islands in terms of phonology, grammar and lexicon concentrating on a comparison of preverbal pronouns and possessives in the speech of Yalobi (Waya), Soso (Naviti) and Nacula village (Nacula). I shall briefly consider the sociolinguistic situation in the village of Soso, Naviti, which suggests that the marriage patterns there may have an impact on the communalect spoken. As I am just beginning to study these communalects, any conclusions must be considered tentative.

My data is derived from a variety of sources. I have been visiting Soso for 20 years during which time I have been recording stories and gathering linguistic information in an informal way. The Nayato family, with whom I stay, have kinship connections with Nacula, Soso, Yalobi, Yaqeta and Nabukeru (Yasawa Island). They intuitively distinguish four areas of Yasawan speech – Waya and Viwa (a small island west of Waya); Naviti; Yaqeta; and the northern islands of Nacula, Yasawa, Matakawalevu and Tavewa. I am very grateful for all their help and that of Sakaraia Naivalu and Naomi Liku in preparing this paper.



Map: Location of Yasawan communalects

There have been few studies of Yasawan communalects. Capell and Lester (1941) used a North Yasawan sentence and Wayan pronouns in support of their thesis of different migrations to Fiji. In his Fijian dictionary, Capell (1941, reprinted 1973) noted phonological differences among some dialects of Fijian including the labiovelars of Western Fijian. His tables of cardinal pronouns and possessives included examples from Waya and Yasawa Island, but their forms were heavily influenced by Bauan. In 1953, Raven-Hart published a paper which analysed some features of the grammar and vocabulary of the communalect spoken at Nabukeru on Yasawa Island.

For his doctoral dissertation, Albert Schütz conducted taped interviews with informants of 105 villages throughout Fiji in 1960–61. He used a 400 word list and also sought grammatical and phonological information. The thesis (1962) concentrated on villages of Viti Levu, where he was able to identify the location of the Western-Eastern divide. He subsequently published a phonemic typology for the whole of the Fijian Islands and this included data from Yalobi (Waya), Kесе (Naviti), Yaqeta Island, Nacula and Nabukeru, Teci and Yasawairara villages on Yasawa Island (Schütz 1963).

The most extensive research into a Yasawan dialect has been the work of Pawley and Sayaba on the dialect of Waya. Their dictionary (forthcoming) is in the final stages of completion, their paper on possession (1990) will be the basis for comparison with other Yasawan dialects later in this paper, and Pawley's paper on the verb 'to be' is published in this volume. Their Wayan data was used to analyse grammatical reconstruction and change in Polynesia and Fiji (1970) and in a study of dialect divisions when the reconstructed proto

Eastern and proto Western Fijian from proto Fijian challenged the findings of Capell and Lester (1971). Further historical analysis was undertaken by Geraghty in his doctoral dissertation on the history of the Fijian languages (1983).

I am grateful for Professor Pawley's advice and comments, the copies of his fieldnotes (1967–68) recording speakers from Marou (Naviti), Yaqeta, Malakati (Nacula) and Teci (Yasawa Island) and the use of a draft copy of the Wayan dictionary.

To measure the extent of the homogeneity of Western Fijian, I shall use some comparative data from Biggs' study of the Ba dialects (1948), and MacKenzie's data on Savatu and Navatusila, situated in inland Viti Levu (1995).

In describing the language of the Yasawas, I am attempting to demonstrate differences in traditional Yasawan words or grammar, rather than the modified Bauan (Standard Fijian) loanwords which are becoming so much a part of the speech of Yasawan people.

2 Phonology

The phonological features identified as Western Fijian occur in the Yasawas. There are labiovelar contrasts of *k/kw*, *g/gw* and *q/qw*:

<i>kali</i> 'pillow'	<i>gali</i> 'be pleasant'	<i>leqa</i> 'be short of something'
<i>kwali</i> 'sinker'	<i>gwali</i> 'be fast'	<i>leqwa</i> 'another'

The velar is fricativised, *k* > *x* and/or voiced but the degree varies between communalects.

In comparison with Standard Fijian, vowel raising occurs commonly in syllable final *-a#* > *-e#* as in *berabera* > *berebere* 'late'; or the collective prefix *vei-* > *vi-*. Vowel deletion occurs when *u* > \emptyset /*m*_ as in *tamu* > *tam* 'don't' or *mamutou* > *mamtou*. 'our' (Ie3)

Table 1: Phonological inventory¹

Consonants	bilabial	apico-dental	apico-alveolar	dorso-velar	labio-velar
nasal	<i>m</i>	<i>n</i>		<i>g</i> [ŋ]	<i>gw</i> [ŋw]
voiceless stop		<i>t</i>	<i>j</i> [ty]	<i>k</i> [x]	<i>kw</i> [xw]
voiced stop	<i>b</i> [mb]	<i>d</i> [nd]		<i>q</i> [ŋg]	<i>qw</i> [ŋgw]
trill			<i>r</i>		
prenasalised trill			<i>dr</i>		
voiceless fricative			<i>s</i>		
voiced fricative	<i>v</i> [β]				
lateral			<i>l</i>		
semi-vowel			<i>y</i>		<i>w</i>

Vowels are *i*, *e*, *u*, *o*, *a*, with a length distinction.

Yasawan phonology is relatively consistent. One phonetic variation was described by Schütz (1963:69) as 'a voiceless apical (or pre-palatal) affricate with lateral release' occurring in the word *ila* from some Naviti villages. Schütz recorded the word at Kese, Naviti but not at Nabukeru, Yasawa Island where Raven-Hart wrote "The indefinite article is *e t'la na*.... Y-speakers insist that it is *e tila na*, but this is never heard". (1953:34) This is not a

¹ Soso dialect, based on MacKenzie (1995).

phonetic feature confined to the Yasawas, but was recorded by Biggs (1948:82) for the Nailanga communalelect in Ba Province, by Schütz (1963:69) in a village in Naitisiri as well as Ba and Nadroga villages, and Geraghty (1983:68) for Nakoroboya near Tavua.

Yaqeta varies from other communalelects in showing /d/ rather than /t/ for all first person inclusive pronouns. Informants from other Yasawan islands have remarked that speakers from Waya or Viwa have different intonation.

Table 2: Yasawa preverbal pronouns

Person	Waya	Soso	Marou	Nacula	Yaqeta	Yasawa Island	Nalotawa (Ba)	Savatu Navatusila
I nonPast	<i>qi</i>	<i>qi</i>	<i>qi</i>	<i>qi</i>	<i>qi</i>	<i>qi</i>	<i>qi</i>	<i>qi</i>
I Past	<i>qu</i>	<i>qu</i>	<i>qu</i>	<i>qu</i>	<i>qu</i>	<i>qu</i>	<i>qu</i>	<i>a qu</i>
Ii2 NP	<i>ti</i>	<i>tari</i>	<i>tari</i>	<i>tari</i>	<i>dari</i>		<i>dari</i>	
Ii2 P	<i>tu</i>	<i>taru</i>	<i>taru</i>	<i>taru</i>	<i>daru</i>		<i>daru</i>	
Ii3 NP	<i>teva</i>	<i>ti</i>	<i>ti</i>	<i>ti</i>	<i>di</i>		<i>zi</i>	
Ii3 P	<i>teva</i>	<i>tu</i>	<i>tu</i>	<i>tu</i>	<i>du</i>		<i>du</i>	
Iipl NP	<i>ta</i>	<i>ti</i>	<i>ti</i>	<i>tei</i>	<i>dei</i>		<i>zi/dei</i>	
Iipl P	<i>te</i>	<i>tu</i>	<i>ta</i>	<i>ta</i>	<i>da</i>		<i>da</i>	
Ie2 NP	<i>eri</i>	<i>mari</i>	<i>maru/mari</i> (fut)	<i>mari</i>	<i>mari</i>	<i>mari</i>	<i>mari</i>	<i>mari</i>
Ie2 P	<i>aru</i>	<i>maru</i>	<i>maru</i>	<i>maru</i>	<i>maru</i>	<i>maru</i>	<i>maru</i>	<i>maru</i>
Ie3 NP	<i>eba</i>	<i>mati</i>	<i>matu/mati</i> (fut)	<i>mati</i>	<i>mati</i>	<i>mamiti</i>	<i>madi</i>	<i>mazi/maji</i>
Ie3 P	<i>aba</i>	<i>matu</i>	<i>matu</i>	<i>matu</i>	<i>matu</i>	<i>mamutu</i>	<i>madu</i>	<i>madu/matu</i>
Iepl NP	<i>mam</i>	<i>mami</i>	<i>mami</i>	<i>mami</i>	<i>mam/</i> <i>m</i>	<i>mamiti</i>	<i>mami</i>	<i>mami</i>
Iepl P	<i>mam</i>	<i>mamu</i>	<i>mamu</i>	<i>mamu</i>	<i>mam</i>	<i>mamutu</i>	<i>mamu</i>	<i>mam</i>
II NP	<i>e</i>	<i>o i</i>	<i>o i/e</i> (fut)	<i>o i</i>	<i>i</i>	<i>i</i>	<i>i</i>	<i>oi/i</i>
II P	<i>o</i>	<i>o</i>	<i>o</i>	<i>o</i>	<i>o</i>	<i>o</i>	<i>o</i>	<i>o</i>
II2 NP	<i>oru</i>	<i>miri</i>	<i>murū/miri</i>	<i>miri</i>	<i>miri</i>	<i>miri</i>	<i>miri</i>	<i>miri</i>
II2 P	<i>oru</i>	<i>murū</i>	<i>murū</i>	<i>murū</i>	<i>murū</i>	<i>murū</i>	<i>murū</i>	<i>murū</i>
II3 NP	<i>oba</i>	<i>miti</i>	<i>mutu/miti</i> (fut)	<i>miti</i>	<i>miti</i>	<i>miti</i>	<i>miti</i>	<i>miji</i>
II3 P	<i>oba</i>	<i>mutu</i>	<i>mutu</i>	<i>mutu</i>	<i>mutu</i>	<i>mutu</i>	<i>mutu</i>	<i>mutu</i>
IIpl NP	<i>om/m</i>	<i>mi</i>	<i>m, mutu/</i> <i>miti</i> (fut)	<i>mi</i>	<i>mi</i>	<i>miti</i>	<i>mi</i>	<i>mi</i>
IIpl P	<i>om/m</i>	<i>mu</i>	<i>mutu</i>	<i>mu</i>	<i>mu</i>	<i>mutu</i>	<i>mu</i>	<i>mu</i>
III NP	<i>ei</i>	<i>ei</i>	<i>a/ei</i> (fut)	<i>e</i>	<i>ei</i>	<i>ei</i>	<i>e</i>	<i>i/e</i>
III P	<i>a</i>	<i>a</i>	<i>a</i>	<i>a</i>	<i>a</i>	<i>a</i>	<i>a</i>	<i>a</i>
III2 NP	<i>eri</i>	<i>eri</i>	<i>erei</i>	<i>eri</i>	<i>eri</i>	<i>aru</i>	<i>eri</i>	<i>eri</i>
III2 P	<i>aru</i>	<i>aru</i>	<i>aru</i>	<i>aru</i>	<i>aru</i>	<i>aru</i>	<i>aru</i>	<i>aru</i>
III3 NP	<i>eri</i>	<i>eri</i>	<i>erei</i>	<i>eri</i>	<i>eri</i>	<i>aru</i>	<i>eri</i>	<i>eri</i>
III3 P	<i>aru</i>	<i>aru</i>	<i>ara</i>	<i>aru</i>	<i>aru</i>	<i>aru</i>	<i>aru</i>	<i>aru</i>
IIIpl NP	<i>ere/erei</i>	<i>erei</i>	<i>ara/erei</i> (fut)	<i>eri</i>	<i>erei</i>	<i>ara</i>	<i>erei</i>	<i>eri</i>
IIIpl P	<i>ara</i>	<i>ara</i>	<i>ara</i>	<i>aru</i>	<i>ara</i>	<i>ara</i>	<i>ara</i>	<i>ara</i>

SOURCES: Pawley (1967–68) for Waya, Marou, Yaqeta; Raven-Hart (1953) Yasawa Is.; Biggs (1948) Nalotawa; MacKenzie (1995) Savutu/Navatusila; personal fieldnotes (n.d.), Soso, Nacula. *z* represents a prenasalised palatal fricative [ʔʒ]

3 Grammar

Although Wayan has been used as an example of a Western Fijian dialect, it is quite deviant in some respects from other Yasawan communalects. This is particularly the case in the categories of preverbal pronouns and possessive pronouns.

3.1 Preverbal pronouns

Table 2 shows the preverbal pronouns for various areas of the Yasawas and Nalotawa in Ba and Savutu/Navatusila in Colo for comparison. In contrast to Standard Fijian, pronouns in most of Western Fiji have tense distinctions. The past or non-time are represented by *-u#* and the present/future by *-i#* in all non-singular cases (except for the merging of dual and trial third person) in all the communalects studied except for Wayan, which has remarkably different first and second non-singular forms.

The Wayan trial form has a medial bilabial [mb] or [β] in the first and second persons, whereas other Yasawa communalects have a vowel change from first person exclusive to form the second person nonsingular pronouns.

Ie2	<i>maru/mari</i>	Ile2	<i>muru/miri</i>
Ie3	<i>matu/mati</i>	Ile3	<i>mutu/miti</i>
Iepl	<i>mamu/mami</i>	Ilepl	<i>mu/mi</i>

In Wayan there is no difference in form between first person exclusive dual and third person dual/trial.

There is no tense distinction in the Wayan first person inclusive trial, exclusive plural, and all second person non-singular pronouns. These are constructed by adding a number marker to the second singular past form *o* giving

II2	<i>oru</i>
II3	<i>oba</i>
IIpl	<i>om</i>

There are communalect variations in distinguishing tense. Pawley's (1967–68) data suggests a future/non-future distinction exists at Marou village on Naviti:

<i>o i lā</i>	'You are going'
<i>e na lā</i>	'You will go'
<i>o lā</i>	'You went'

Both Biggs (1948:84) and Raven-Hart (1953:34) stated that the first person inclusive/exclusive distinction was not apparent in Nalotawa and Yasawa Island communalects respectively.

3.2 Cardinal pronouns

In other varieties of pronoun Wayan again differs from other Yasawa communalects in the first person non-singular forms. For example the cardinal or focal pronouns are:

Table 3: Cardinal pronouns²

Person	Waya	Soso	Marou	Yaqeta	Malakati	Teci
I	<i>o yau</i>	<i>o yau</i>	<i>o yau</i>	<i>ko yau</i>	<i>o yau</i>	<i>o yau</i>
Ii2	<i>o tuketa</i>	<i>o taru</i>	<i>o taru</i>	<i>o daru</i>	<i>o taru</i>	<i>o daru</i>
Ii3	<i>o vatiketa</i>	<i>o tatou</i>	<i>o tatou</i>	<i>o datou</i>	<i>o tatou</i>	<i>o tatou</i>
Iipl	<i>o vatiketa</i>	<i>o mam</i>	<i>o tatou</i>	<i>o da</i>	<i>o tatou</i>	<i>o tatou</i>
Ie2	<i>o rukemam</i>	<i>o maru</i>	<i>o maru</i>	<i>o maru</i>	<i>o maru</i>	<i>o maru</i>
Ie3	<i>o vatikemam</i>	<i>o mamtou</i>	<i>o mamtou</i>	<i>o mamtou</i>	<i>o mamtou</i>	<i>o mamutou</i>
Ieipl	<i>o vatikemam</i>	<i>o mam</i>	<i>o mamtou</i>	<i>o mam</i>	<i>o mamtou</i>	<i>o mamutou</i>
II	<i>o iko</i>	<i>o iko</i>	<i>o iko</i>	<i>o iko</i>	<i>o iko</i>	<i>o iko</i>
II2	<i>o muru</i>	<i>o muru</i>	<i>o muru</i>	<i>o muru</i>	<i>o muru</i>	<i>o muru</i>
III3	<i>o mutou</i>	<i>o mutou</i>	<i>o mutou</i>	<i>o mutou</i>	<i>o mutou</i>	<i>o mutou</i>
IIpl	<i>o mutou</i>	<i>o mu</i>	<i>o mutou</i>	<i>o mu</i>	<i>o mutou</i>	<i>o mutou</i>
III	<i>o koya</i>	<i>o koya</i>	<i>o koya</i>	<i>o koya</i>	<i>o koya</i>	<i>o koya</i>
III2	<i>o koru</i>	<i>o koru</i>	<i>o koru</i>	<i>o koru</i>	<i>o koru</i>	<i>o koru</i>
III3	<i>o koru</i>	<i>o kora</i>	<i>o koru</i>	<i>o koru</i>	<i>o koru</i>	<i>o koru</i>
IIIpl	<i>o kora</i>	<i>o kora</i>	<i>o kora</i>	<i>o kora</i>	<i>o koru</i>	<i>o kora</i>

Only Yaqeta maintains four persons for cardinal pronouns. Other Yasawa communalects distinguish singular, dual and plural, combining trial and plural for first and second person and dual and trial for third person. The one plural for both first persons in Soso needs to be verified. Malakati has only a singular and plural distinction in the third person, otherwise the same forms were recorded in Naviti and Yasawa islands.

The Wayan first and second person pronouns have the prefixes *ru-/tu-* for dual and *vati-* for trial. These are not found in paradigms for other Yasawan communalects.

3.3 Possessive pronouns

In all Fijian communalects there is a complex system to represent possession particularly among possessive pronouns, which vary according to the semantics and syntax of the noun possessed. Earlier analyses of Standard Fijian distinguished morphosyntactic possessive pronoun constructions depending on whether the noun was a kin term, inalienable, drinkable, edible or neutral. Pronouns were considered to concord with nouns of a particular gender.

Milner (1972:66) demonstrated that the same noun could take different forms of possessive pronouns depending on the particular situation.

- na noqu yaqona* 'my kava' (which I have grown to sell)
na mequ yaqona 'my kava' (which I drink)

² Source: Pawley (1967–68).

He described these as nouns (bases) belonging to more than one class or gender. He also recognised the existence of a 'passive' class in contrast to an 'active' or neutral class.

Later analysts rejected the idea of gender categories in favour of contextual conditioning of the form of possessive (Geraghty 1983:246-251; Schütz 1985:465).

In a detailed examination of Wayan, Pawley and Sayaba (1990) identified eight possessive constructions.

Table 4: Wayan possessive constructions

Construction	Semantics	Prefix	Position	Article
1	kinship		postposed	proper
2	kinship		preposed	none
3	natural part		preposed	none
4	manufactured part	<i>ke-</i>	preposed	common
5	food possession	<i>ke-</i>	preposed	common
6	drink possession	<i>me-</i>	preposed	common
7	passive possession	<i>ke-</i>	preposed	common
8	active possession	<i>le-</i>	preposed	common

I have tested this typology and the examples chosen by Pawley and Sayaba on speakers of Soso and Nacula communalects.

The first construction, defined as kinship 1, is a closed category restricted to about 20 kinship terms. The proper article precedes the possessed noun which is followed for all except the second singular and third non-singular by a remnant article *i* before the possessive pronoun. Soso and Nacula pronouns lack the remnant article. Both Soso and Nacula informants used *tina-yau* or *tina-qu*, the Bauan construction.

Table 5: Construction 1. kinship possession: 1

Example: 'mother'

Person	Wayan	Soso	Nacula
I	<i>o mnai au</i>	<i>o tina yau</i>	<i>o tina yau</i>
II	<i>o mnam</i>	<i>o tinam</i>	<i>o tinam</i>
III	<i>o mnaya</i>	<i>o tinaya</i>	<i>o tinaya</i>
Ii2	<i>o mnai rumeda</i>	<i>o tina taru</i>	<i>o tina daru</i>
Ii3	<i>o mnai vatimeda</i>	<i>o tina tatou</i>	<i>o tina datou</i>
Iipl	<i>o mnai meda</i>	<i>o tina tā</i>	<i>o tina dā</i>
Ie2	<i>o mnai rumemam</i>	<i>o tina maru</i>	<i>o tina maru</i>
Ie3	<i>o mnai vatimemam</i>	<i>o tina mamtou</i>	<i>o tina mamtou</i>
Iepl	<i>o mnai memam</i>	<i>o tina mam</i>	<i>o tina mam</i>
II2	<i>o mnai rumem</i>	<i>o tina muru</i>	<i>o tina muru</i>
II3	<i>o mnai vatimem</i>	<i>o tina mutou</i>	<i>o tina mutou</i>
IIpl	<i>o mnai mem</i>	<i>o tina mū</i>	<i>o tina mū</i>
III2	<i>o mnadru</i>	<i>o tinadru</i>	<i>o tinadru</i>
III3	<i>o mnadru</i>	<i>o tinadru</i>	<i>o tinadru</i>
IIIpl	<i>o mnadra</i>	<i>o tinadra</i>	<i>o tinadra</i>

The second construction, kinship 2, has only six examples, three of which (*batuvu* 'man's sister's child'/'woman's brother's child', *karua* 'close relative' and *tavale* 'cross-cousin') occurred also in construction 1. The form of pronoun copies those of construction 1, except for a preposed position without an article, inclusive pronouns in Nacula show /t/ rather than /d/. More research is needed to determine whether Soso has a kinship 2 pattern. *Kawa* 'progeny' had the first and second singular forms for the construction but the other persons had the forms for construction 8. *Tavale* had the possessive structure of construction 1.

Table 6: Construction 2. kinship 2

Example: 'progeny'

Person	Wayá	Soso	Nacula
I	<i>qu kawa</i>	<i>qu kawa</i>	<i>qu kawa</i>
II	<i>m kawa</i>	<i>mu kawa</i>	<i>mu kawa</i>
III	<i>e kawa</i>	<i>lea kawa</i>	<i>a kawa</i>
Ii2	<i>rumeda (or tumeda) kawa</i>	<i>ledaru kawa</i>	<i>taru kawa</i>
Ii3	<i>vatimeda kawa</i>	<i>ledatu kawa</i>	<i>tu kawa</i>
Iipl	<i>meda (or da) kawa</i>	<i>leda kawa</i>	<i>ta kawa</i>
Ie2	<i>rumemam kawa</i>	<i>lemaru kawa</i>	<i>maru kawa</i>
Ie3	<i>vatimemam kawa</i>	<i>lemamtou kawa</i>	<i>matu kawa</i>
Iepl	<i>memam kawa</i>	<i>lemamu kawa</i>	<i>mam kawa</i>
II2	<i>rumem kawa</i>	<i>lemuru kawa</i>	<i>muru kawa</i>
II3	<i>vatimem kawa</i>	<i>lemutou kawa</i>	<i>mutu kawa</i>
IIpl	<i>mem kawa</i>	<i>lemu kawa</i>	<i>mua kawa</i>
III2	<i>medru (or dru) kawa</i>	<i>ledru kawa</i>	<i>ru kawa</i>
III3	<i>medru (or dru) kawa</i>	<i>ledru kawa</i>	<i>ru kawa</i>
IIIpl	<i>medra (or dra) kawa</i>	<i>ledra kawa</i>	<i>ra kawa</i>

Wayan pronouns for construction 3, natural parts including body parts, are the same as those in construction 2. Nacula pronouns, however differ in the third person *e* instead of *a*. The only variation in Soso is in the inclusive dual. All Pawley and Sayaba's semantic categories for this construction were tested and found to be present in Soso. These include extrusions on the body, external parasites, intimate possessions, name, voice, breath, rights and obligations, skill and names of manufactured objects derived from body part terms or containing the prefix *i-*.

Table 7: Construction 3. natural part possession

Example: 'head'

Person	Waya	Soso	Nacula
I	<i>qu ulu</i>	<i>qu ulu</i>	<i>qu ulu</i>
II	<i>m ulu</i>	<i>m ulu</i>	<i>mu ulu</i>
III	<i>e ulu</i>	<i>e ulu</i>	<i>e ulu</i>
Ii2	<i>rumeda (or tumeda) ulu</i>	<i>daru/taru ulu</i>	<i>taru ulu</i>
Ii3	<i>vatimeda ulu</i>	<i>du ulu</i>	<i>tu ulu</i>
Iipl	<i>meda (or da) ulu</i>	<i>da ulu</i>	<i>ta ulu</i>
Ie2	<i>rumemam ulu</i>	<i>maru ulu</i>	<i>maru ulu</i>
Ie3	<i>vatimemam ulu</i>	<i>matu ulu</i>	<i>matu ulu</i>
Iepl	<i>memam ulu</i>	<i>mamu ulu</i>	<i>mam ulu</i>
II2	<i>rumem ulu</i>	<i>muru ulu</i>	<i>muru ulu</i>
II3	<i>vatimem ulu</i>	<i>mutu ulu</i>	<i>mutu ulu</i>
IIpl	<i>mem ulu</i>	<i>mu ulu</i>	<i>mua ulu</i>
III2	<i>medru (or dru) ulu</i>	<i>dru ulu</i>	<i>dru ulu</i>
III3	<i>medru (or dru) ulu</i>	<i>dru ulu</i>	<i>dru ulu</i>
IIIpl	<i>medra (or dra) ulu</i>	<i>dra ulu</i>	<i>dra ulu</i>

The manufactured parts paradigm, construction 4, for third person only is identical for Waya, Soso and Nacula.

Table 8: Construction 4. manufactured parts

Example: 'mast'

Person	Waya/Soso/ Nacula
III	<i>na kea vanā</i>
III2	<i>na kedru vanā</i>
III3	<i>na kedru vanā</i>
IIIpl	<i>na kedra vanā</i>

Construction 5 is labelled food possession and the example given for Waya is *tovatova* 'garden' which is a food source, showing that not just edible objects, but things associated with food, such as sources of food or containers of food may have the *ke-* prefix or infix for this construction.

Milner gave this example from Standard Fijian (1972:66):

na nomudou dalo oqo? 'is this your taro-patch?'

na kemudou dalo oqo 'here's your taro (to eat)'

This is not the case in Nacula or Soso where *ilaulau* 'garden' uses construction 8, the active category with *le-*, but Soso allows *na kemu cakau* 'your fishing ground'.

Table 9: Construction 5. food possession

Example: 'garden' (as a food source) or 'cassava' (Soso and Nacula)

Person	Waya	Soso/Nacula
I	<i>na qiau tovatova</i>	<i>na kequ tavioka</i>
II	<i>na kem tovatova</i>	<i>na kemu tavioka</i>
III	<i>na kea tovatova</i>	<i>na kea tavioka</i>
Ii2	<i>na rukeda tovatova</i>	<i>na kedaru tavioka</i>
Ii3	<i>na vaticeda tovatova</i>	<i>na kedatou tavioka</i>
Iipl	<i>na keda tovatova</i>	<i>na keda tavioka</i>
Ie2	<i>na rukemam tovatova</i>	<i>na kemaru tavioka</i>
Ie3	<i>na vaticemam tovatova</i>	<i>na kemamtou tavioka</i>
Iepl	<i>na kemam tovatova</i>	<i>na kemam tavioka</i>
II2	<i>na rukem tovatova</i>	<i>na kemuru tavioka</i>
II3	<i>na vatikem tovatova</i>	<i>na kemutou tavioka</i>
IIpl	<i>na kem tovatova</i>	<i>na kemū tavioka</i>
III2	<i>na kedru tovatova</i>	<i>na kedru tavioka</i>
III3	<i>na kedru tovatova</i>	<i>na kedru tavioka</i>
IIIpl	<i>na kedra tovatova</i>	<i>na kedra tavioka</i>

Drink possession has the affix *me-* and a similar construction to that for food possession. Included in this construction 6 are mushy fruits, sucked objects such as *na mequ tovu* 'my sugar cane' and some soft seafood *na mequ yaqa* 'my shellfish' but *na kequ vasua* 'my clam'.

Table 10: Construction 6. drink possession

Example: Water (for drinking)

Person	Waya	Soso/Nacula
I	<i>na meqiau wai</i>	<i>na mequ wai</i>
II	<i>na mem wai</i>	<i>na memu wai</i>
III	<i>na mea wai</i>	<i>na mea wai</i>
Ii2	<i>na rumeda (or tumeda) wai</i>	<i>na medaru wai</i>
Ii3	<i>na vatimeda wai</i>	<i>na medatou wai</i>
Iipl	<i>na meda wai</i>	<i>na meda wai</i>
Ie2	<i>na rumemam wai</i>	<i>na memaru wai</i>
Ie3	<i>na vatimemam wai</i>	<i>na memamtou wai</i>
Iepl	<i>na memam wai</i>	<i>na memam wai</i>
II2	<i>na rumem wai</i>	<i>na memuru wai</i>
II3	<i>na vatimem wai</i>	<i>na memutou wai</i>
IIpl	<i>na mem wai</i>	<i>na memū wai</i>
III2	<i>na medru wai</i>	<i>na medru wai</i>
III3	<i>na medru wai</i>	<i>na medru wai</i>
IIIpl	<i>na medra wai</i>	<i>na medra wai</i>

Constructions 7 and 8 signify whether the possessor is passive or active. The passive example used, *ialoalo*, means the image of someone, such as the reflection in water. There may be semantic differences in usage of this word in Nacula and Soso, where *ialoalo* is used for the images in a motion picture, and the Bauan word *itaba* is used for the modern image such as a photograph. Hence *na kequ itaba* 'my picture' is a picture of me, whereas *na lequ itaba* is 'the picture I have taken'. The passive construction has the same form as the food possession construction. The active construction, for example *sue* 'house' substitutes *le-* for *ke-*.

From this brief examination, it appears that the morphosyntactic and semantic constructions identified by Pawley and Sayaba for Wayan possessive pronouns concur with those for Nacula and Soso except for some semantic variations.

4 Vocabulary

Pawley and Sayaba estimated a cognate count of 61% in a 'basic vocabulary' 200 word list between Bauan and Wayan (1971:415).

Among the Yasawa communalects, Wayan seems to be the most deviant. I have shown above, the uniqueness of the Wayan *ru-* and *vati-* forms of pronouns. Some common words vary:

English	Wayan	Other Yasawan
'house'	<i>were</i>	<i>sue</i>
'no'	<i>lala</i>	<i>tikai</i>
'tomorrow'	<i>qwataqwata</i>	<i>roaroa</i>

Other island communalects have minor lexical variations. Nacula uses *wara* not *bi* for 'many'. Naviti communalects have *driu* not *drisi* for 'red'. The demonstratives in particular show great variation:

English	Waya	Soso	Nacula	Yasawa
'this'	<i>kwē/kwema</i>	<i>kwei</i>	<i>eki</i>	<i>kwei</i>
'that'	<i>sōkwē/sōkwema</i>	<i>sōkwē</i>	<i>agi</i>	<i>oki</i>

Lexical variation may occur between villages on the same island. On Naviti, Malevu uses *lequcia* 'to see' instead of *dania* which is used elsewhere on Naviti. Kese has *viseu* for *visawaqe* 'to play' and Somosomo says *sakisere* not *saro* for 'chest'. This demonstrates that Yasawan communalect divisions occur at village as well as island level.

5 The sociolinguistic situation

Yasawan speech is being influenced by Standard Fijian. I found that the word lists I consulted often mixed Bauan words with the communalect it purported to record. Often a Bauan verb had the Yasawan transitive ending *-Cia* (where C stands for various consonants). Parents from Nacula say that younger people tend to use more general words like *nō* instead

of *gatule* for 'lie' or *vinā* for 'good' when a more appropriate term would be the more specific *koba* 'a good smell'.

Within a village, the speech of informants may vary according to differences in age, educational attainment, time spent outside the village or degree of immunity from outside influences. Yasawan communalects compete against other languages. The Fijian language variety heard on the radio is Standard Fijian, the newspaper is in that language or English, and the language of instruction in school is English.

Within the family, the mother's communalect influences the children's speech. Generally wives reside in their husband's village. In Soso, there is still considerable intermarriage within the village. In a sample of 24 Soso married men, 14 have married Soso women, seven married other Yasawan women, two brothers married Ba women and only one wife came from a non-Western speaking area.

On the surface, this would seem a stable linguistic situation, but when the birthplace of the previous generation is considered, the influence of the mother's speech becomes apparent. Of the 14 couples where both partners came from Soso, 10 had at least one mother from Waya or Viwa and only three couples had both mothers from Soso. Because of this there is a strong Wayan influence on the Soso communalect.

There are also strong links between the Yasawas and some villages in Ba, particularly Vitogo, Naviago and Votua, where some settlement in the Yasawas originated and which are still linked through intermarriage.

6 Conclusion

The Yasawas are a distinctive geographical region which has been largely isolated from contact with English-speakers, except for some villages on the tourist cruise route. Although the influence of Standard Fijian is strong, communalects are maintained, which allows comparison both at island and village level. Waya has some markedly different features from other Yasawan communalects notably in its pronouns. Preverbal pronouns represent tense differently. The forms of possessive pronouns, though unique, still conform to the position of the pronoun relative to the possessed noun characteristic of Yasawan pronouns.

There are lexical differences which characterise individual islands, or villages within an island. A rigorous linguistic survey of this area is needed to give further insights into the nature of Yasawan communalects and factors causing language change.

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15 *Kuhane and 'aitu. Two cognate Polynesian terms which exclude each other*

HORST CAIN AND ANNETTE BIERBACH

1 Abstract – Approach

In a current research project on religious key-terms from Rapa Nui in their Austronesian context, we analysed the term *kuhane* semantically, etymologically and morphologically. The conclusions which we arrived at are the following:

1. Both terms, *kuhane* and *'aitu*, and their Polynesian variants are of an identical etymology.
2. According to the available evidence, both terms differ semantically from one another in that *kuhane* seems to apply both to the spirit of a living person, i.e. a person's soul, and the spirit of a defunct, i.e. a person's ghost, whereas *'aitu* applies exclusively to ghosts.
3. Both terms differ from one another morphologically in that *kuhane* is a compound of the Polynesian prefix *ku-* and the base *hane*, whereas *'aitu* represents a Polynesian base alone.
4. While the term *hane* entered Polynesia via Micronesia, *'aitu* took the southern route through eastern Indonesia and Melanesia.
5. Both terms are of different distribution within Polynesia and strictly exclude each other. While *kuhane* is restricted to the Marquesas, Hawai'i, Mangareva and Rapa Nui, *'aitu* occurs only in the rest of Polynesia. The only exception from that rule appears to be the Tuamotus where *kuhane* is said to have been used on the island of Napuka. This exception seems to be due, however, to direct influence from the neighbouring Marquesas.

2 Semantics and morphology of *Kuhane* and *'aitu*

Kuhane is an eastern Polynesian term which occurs in two different forms in five languages. Its listing for Rennell in the PPN word list (Biggs 1979:16), which appears to be the only hint of its occurrence in western Polynesia, has proven to be an error, as we have been assured by Samuel H. Elbert and Rolf Kuschel, two prominent experts on Rennellese ethnolinguistics, and has been confirmed by Bruce Biggs himself in a personal letter of 15th March 1990.

On Rapa Nui we have *kuhane* said to mean "soul, spirit, phantom" (Churchill 1912:219) or "ghost, soul, spectre, spirit" (Fuentes 1960:239, 771; see also Roussel 1908:19, 42, 44; 1917:20, 68, 75). Englert (1938:72) adds: "persona u objeto con que uno sueña y considera como presagio de algo que ha de suceder". As an adjective it is supposed to mean "immaterial, spiritual, supernatural" (Churchill 1912:219; Roussel 1908:87, 1917:163).¹

All this is more confusing than enlightening because, on the one hand, *kuhane* is said to designate the "soul", i.e. the "immaterial" or "spiritual" component of a living *tagata* and, according to Englert, even of an object, which is visible in dreams; while, on the other hand, it is supposed to denote the "ghost", i.e. the same "soul" or "spirit" of the dead. Consequently, *kuhane* is equated by some authors both with *akuaku* (Roussel 1908:19, 42; see also 1917:20; Fuentes 1960:957) and *vārua* (Fuentes 1960:957). On the basis of this evidence a more precise definition of *kuhane* is impossible. However, some of our Rapa Nui informants maintained that, in spite of the ambiguous use of the term, it referred to the "souls" of living *tagata* rather than to "ghosts". Its application to these, i.e. the postmortal human "souls", would thus appear to be a metonymical extension. In neither case would the epithet "supernatural" be justified and must, once and for all, be rejected as a eurocentrism.

While *kuhane* may be and, in fact, is metonymically applied to "ghosts", neither *akuaku* nor *vārua* are ever used to designate the "soul" of a living person. Englert's additional identification of *kuhane* with persons seen in dreams is possible although we have no confirmation of such a belief from any of our informants. However, the existence of the concept of a "dream ego" or "spiritual double" can be inferred from the tradition of Haumaka's *kuhane* discovering and exploring Rapa Nui while Haumaka was asleep in Hiva (Englert 1939:23-25). The "deliberate transitive verb", as Elbert and Pukui would term a formation like the Rapa Nui *hakakuhanehane*, which is found in one of the traditional stories recorded by Englert (1980:270), also yields no decision in favour of the "dream ego" or "external double" of a living person and the "spirit" of a dead person or "ghost". According to Elbert and Pukui (1979:77) such verbs are formed "regardless of the class of the base" and their meaning can easily be inferred from that of the base. In Englert's story entitled "Cuento de *Repa a Puga*" the protagonist hides in rat holes and manifests himself to his beloved girl by squeaking like a rat. The corresponding phrases and our own English translation read as follows:

- (1) *He ki te tagata i ma'a:*
 (But) a man who knew (what was going on) said (to her):
"E ū'i koe i te me'e ena e hakakuhanehane mai ena pehe kio'e;
 "Beware of that which appears like a 'spirit' in the form of a rat!

¹ The form *kuhange* as given by Thomson (1891:550), and misspelled by Churchill as *kuhanga*, is wrong.

Ko Repa a Puga ta'a me'e ena, ta'e he kio'e!"

Clearly, it is Repa a Puga, no rat!"²

Englert (1980:271) translates the transitive verb *hakakuhanehane*, obviously a compound of the prefix *haka-* and the partially reduplicated noun *kuhane*, as "querer asustar como espíritu", which we render "appear (deliberately) like a 'spirit'".

The Mangarevan lexical evidence is slightly misleading because the dictionaries of Tregear and the Catholic missionaries list two forms of the word, *kuane* (*ku'ane*) and *kuhane*, where there is only the form *kuhane*, pronounced *ku'ane*. Its meanings are given as "a spirit, the soul, a shadow, a shade" and also "a soul that returns to earth", i.e. a revenant (Tregear 1899:40; Janeau 1908:50; Churchill 1912:219). Buck (1938:501-502) writes about the Mangarevans' beliefs concerning the *ku'ane*: "When the material body (*tino*) of man ceased to function after death, his ghost or soul (*ku'ane*) passed on to the *Pō*... The spirit (*ku'ane*) was a detachable entity that could be abstracted (*naku*) from the body by magic. The sorcerer killed the spiritual essence; and the material body, divorced from its *ku'ane*, died... The native concept is that soul and body are necessary for perfect health... Under normal conditions the soul left the body on death and proceeded of its own volition toward the *Pō*", i.e. one of the destinations of the postmortal human *ku'ane*.

According to our own informants, the Mangarevans, in fact, did not terminologically distinguish between the human "soul" during life and after death. As elsewhere in eastern Polynesia its postmortal physical appearance as a "ghost" was indiscriminately spoken of as *ku'ane* or *tūpāpaku*.

As in the case of many other words, both forms, *kuhane* and *'uhane*, meaning "âme, esprit; intelligence" occur in the Marquesas (Dordillon 1904:169, 283; 1931:242, 424). In addition there is *ma'uhane* which is defined as "dieu des guerriers; esprit d'une femme dont le mari ou le fils est à la guerre ou à la pêche". Handy's (1923:166) remark: "the spirit of the mother of a fisherman, called *ma'uhane*, played a great part in the success of an expedition", induces us to interpret the term as a compound of *ma'u*, meaning "ombre, ombrage; abri...sombre, ombragé; abrité" (Dordillon 1904:182, 1931:260)³ and either *'uhane* or *hane*, denoting protective or guardian "spirit". In the first case, one would have to assume a contraction, whereas the second supposes the most probable earlier existence of the form *hane* instead of *kuhane* or *'uhane*, which is not found in Marquesan now but, as will be seen below, is in Hawai'ian. Nevertheless, both interpretations are speculative and, at best, possibilities. According to our Marquesan informants *kuhane* or *'uhane* designated the "soul" of a living person as well as a person's "ghost" which was in the habit of appearing visibly and tangibly to living people in dreams and visions.

On the Tuamotuan island of Napuka *kuhane* is reported to designate the "soul, spirit of man" (Stimson and Marshall 1964:259) and, according to Pukui and Elbert (1986:363), the Hawai'ian *'uhane* denotes at the same time "soul, spirit, ghost...spiritual".

All this evidence suggests that a consistent terminological distinction between the "soul" of a living person and a person's "ghost" was not made. At least, the term *kuhane* or *'uhane* was everywhere used to designate both phenomena or the one phenomenon under both circumstances, although some of our Rapa Nui informants advocated its primordial application to the "souls" of living people rather than to "ghosts".

² Englert (1980:271) translates: "Pero el hombre que sabía lo que pasaba le dijo: 'Cuidado con éste que quiere asustarte como espíritu en forma de ratón; es *Repa a Puga*, no es ratón!'".

³ For *ma'u* compare *maru* and its Polynesian variants (Tregear 1891:218-219; Biggs 1979:8; Elbert 1941:69-70, 77, 79-80).

In order to analyse this term, we cannot, as a first step, refer to the PPN word list because its entry, **kufane*, said to mean “ghost, soul, spirit” (Biggs 1979:16) does not clarify anything. Furthermore, the form **kufane* seems to be a mere guess. As already anticipated in the discussion of the Marquesan term *ma’uhane*, the Hawai’ian evidence offers a perspective for a successful etymological analysis of the term *kuhane* or *’uhane*.

To start with, Pukui and Elbert (1986:57) also list *hane* defining it as “ghostly, soft, and indistinct sounding...To give life and spirit”. The following example from Fornander (1920, VI:412) illustrates its use: *’O ka hua a Kama i hane, nā lani ka hua*, i.e. “the fruit of Kama was given life, the high chiefs were the fruits”. For its reduplicated form, *hanehane*, also meaning “ghostly”, they give the following example: *Na leo wawalo o ka hanehane*, i.e. “calling voices of the spirit”.⁴ In the *Nānā i ke kumu*, which contains much of Pukui’s knowledge of Hawai’ian customs and traditions, we find the following detailed and enlightening statement: “*’uhane* – spirit; ghost. After introduction of Christianity, soul. Deriv: *hane*, disembodied person.

Says Mary Kawena Pukui of certain of her ancestral beliefs: “Some things are *’e’epa*. Unexplainable.” Accept that, and it becomes easier to know about *’uhane*. For in Hawai’i’s religious-mystic tenets, *’uhane* was: The animating force which, present in the body, distinguished the quick from the dead. And so *’uhane* can be called ‘spirit’.

The vital spark, that, departed from the flesh, lived on through eternity, rewarded for virtue or punished for transgressions in life. Thus *’uhane* is ‘spirit’ in the immortal sense, and the ‘soul’ of Christian concept. Or, as immortal spirit or soul, the *’uhane* might return to visit the living and so be termed a ‘ghost’.

As immortal spirit, *’uhane* could be more specifically an *’aumakua* (god-spirit of a long-dead ancestor), *’unihipili* (deified spirit of a recently deceased person), *akua* (god) or any of the demi-gods, nature spirits called *kupua*. Or the ‘vehicle’ that carried a spirit might eventually be known as the spirit itself. *Makani* is a chill breeze – and any Hawai’ian knows this breeze means a spirit is present. Therefore, *makani* is the spirit.

Incorporated into Christianity, an immortal spirit might become *’uhane Hemolele* or “Holy Ghost”; a wicked being might be called a ‘demon’ or ‘devil’.” (Pukui, Haertig and Lee 1972:193).

Besides an expansion, an extension and a number of transferences of the term *’uhane* we learn from this that *’uhane* was derived from *hane* designating a “disembodied person”. An interesting coincidence of concepts occurs in Samoa where Stair (1896:39, 1897:218-219) speaks with obvious reference to *aitu* or *atua*, without mentioning these terms, of the “disembodied spirit” resembling exactly its former self, i.e. the living person (see also Cain 1979:84-85).

At the same time, the Hawai’ian term *’uhane* is identified as a compound consisting of the prefix *’u-* and *hane*. This is confirmed by Elbert and Pukui in their Hawai’ian grammar (1979:73-74). There *’u-* is listed as a prefix which occurs only with eight bases, *hane* being one of them. In the same authors’ dictionary, this prefix is said to have a qualifying or stative function (Pukui and Elbert 1986:361). This means that the prefix *’u-* determines the quality or status of *hane* as a “disembodied person” or “ghost”, which, in the present case, constitutes a redundancy without any practical effect. The redundant character of the prefix is, perhaps, the reason why the Andrews find it difficult to specify its function. They identify the Tahitian *’u-* with the Māori *ku-* and say that it is a “prefix of most uncertain

⁴ Fornander’s translation of the sentence *’O ka hua a Kama i hane, nā lani ka hua* as “For Kama was barren, his child are the skies” is thus disapproved of by Pukui and Elbert.

significance, often for 'o, often intensive, usually meaningless" (Andrews & Andrews 1944:183).

This evidence is corroborated by that provided by Stimson and Marshall from the Tuamotus. They identify *kū-* with *kō-* and define them as "prefix of simulation" connoting "that the substantive or predicative has a quality or action similar to that involved in the base word; similar to the English suffix *-ish*." We doubt, however, the correctness of their using macrons in this case. This doubt appears to be all the more justified, since Stimson and Marshall themselves (1964:232-233, 258) add a question mark to their identification of the prefixes *ko-* and *kō-*.

As a result of our discussion we feel fully justified in concluding that the Hawai'ian *'uhane* is a compound of *'u-* and *hane* with which it is synonymous. Moreover, we also feel safe now in postulating the same morphology for the term *'uhane*, *kuhane* or *ku'ane* of the other four eastern Polynesian languages.

3 Etymology of *Kuhane* and *'aitu*

After analysing *kuhane* (*'uhane*, *ku'ane*) semantically and morphologically, we propose to draw our attention now to its etymology. In doing so we may disregard the redundant prefix and depart from our postulated common eastern Polynesian base *hane* as documented in Hawai'ian. According to Fischer (1965:343), Barthel also considered the Hawai'ian *hane* to be the key to the analysis of *kuhane* (see also Fedorova 1993:57), an opinion shared by Samuel H. Elbert (pers. comm.). Our thanks are due to Robert Suggs whom we confronted with our problem and who saw a possible relation between *hane* and the Marshallese *an* or *han* meaning "his, her soul". According to François Zewen (pers. comm.), there is no *h* in Marshallese, but the compilers of the Marshallese dictionary felt that it should be added to the so-called "phonemic transcriptions".

On the occasion of writing an article on the religious beliefs of the Micronesians, we tracked down as many Micronesian terms as possible cognates with the eastern Polynesian *hane*. The intriguing results of our search may be seen in Table 1.

Notwithstanding the occasional orthographical problems presented by the autochthonous terms which are not always standardised, this table shows the Micronesian derivatives of Dempwolff's PAn root **hanitu* or **'anitu'* with the basic form, **nitu*, meaning "abgeschiedene Seele" ("separated soul"), whose POc form is **'anitu* (Blust 1990:15) and for which Dempwolff (1926:48, 1938:15, 62) reconstructed a secondary form **hantu'* denoting "Gespenst, Dämon" ("ghost, spectre, demon"). The observable consonant shifts from *n* to *l* or *r*, and from *t* to *d*, *j*, *s* or *z* are quite regular, as are the vowel shifts from *a* to *e*, *i* or *o* and from *u* to *i* or vice versa from *i* to *u* or *ü*. The Palauan *óni* could, as all other terms listed, be derived from Dempwolff's PAn forms. The root vowel of their Micronesian derivatives may be in addition to *a*, *e* and *i* also *o*, as shown by the proper names of numina in our Table 1. The signification of *óni*, "demon", is just as vague as those of religious terms in the area usually are. Unusual, at the most, would be the fact that, in addition to *chelíd*, *óni* is supposed to be a second derivation from the same PAn root and that this example is unique in Micronesia. At any rate, no etymological, semasiological, morphological or phonological reasons speak against such a possibility, which in the eyes of Viktor Krupa (pers. comm.) is a probability.

However, McManus (1977), the only author who mentions *óni*, declares it to be a Japanese loan word, and this opens up a different perspective altogether. If the Palauan *óni*

were a Japanese borrowing, this could easily be explained by the Japanese administration and settlement of Micronesia between 1914 and 1945. The corresponding Japanese etymon would then be *oni* which, according to the German Japanologist Jens Rickmeyer was formerly glottalised. Rickmeyer (pers. comm.) supposed it to stem from the middle Chinese *on* or *in* meaning “shadow”, “to hide”, the modern Mandarin of which is transcribed as *yin* meaning “shady”, “secret”, “dark”, “mysterious”, “cold”, “the negative or female principle in nature; it is the opposite of *yang*” (Mathews 1963:1114-1115). The Japanese *oni* is represented by the Chinese sign for “ghost” which, according to transcription, reads *kuei* or *gui*, a word which is etymologically irrelevant. Rumpf’s article on the Japanese *oni* in Ramming (1941:454-455) reads in our own translation from the German: “Originally collective name for demons, goblins, imps, sprites, etc....In folk-tales the *oni* are savage mountain dwellers who molest the people of the surrounding villages. Often they are described as cannibals. These might well be the rest of an ancient population. Still today, there are several villages the inhabitants of which are thought of as *oni* or *oni* descendants and distinguish themselves not only through strange customs but also through their physical stature from the other inhabitants of the particular regions.”⁵

Dempwolff’s initial hamza marking the possible loss of a consonant is substituted by *ch* in the Palauan *chelid*, *k* or *kh* in the Yapese *kān* (*khan*) and by the epenthetic semivowels *i* in the Ulithian *ialus* or *y* in the Woleaian *yalius*. As can be seen in **hantu*, the substitute for epenthetic reasons may also be an *h* as is the case, for example, in Malay. A hierarchisation of these numina is expressed by attributing qualifying epithets. Thus, the Ponapean *āni* or *eni lapalap* designates the “ancestral ghost of a Nahmwarki” or high chief (Rehg and Sohl 1979:9), the Ulithian *Yonēlāp*, the Aurepikan *Yānelap*, and the Puluwatan *Äluelöb* (sic!) (Damm 1938:142, 273, 352-354) – according to Elbert (1972:243) *Yanūlap* – those of prominent and widely known mythical heroes or gods. Even the magnitude of the Biblical God is acknowledged in the same manner, for he is named and addressed as *Anūlap* (Fritz 1911:80, 97, 106) in the Central Carolines, *Ēnúūnap* (Goodenough and Sugita 1990: 68) in Truk, *Ani* or *Eni Lap* on Ponape (Rehg and Sohl 1979:172) and *Anij Laplap* (Abo et al. 1976:15; Zewen pers. comm.) in the Marshalls. The epithets *lāp*, *lapalap* or *laplap* and variants throughout Micronesia are said to mean “old (of people)” (Fritz 1911:119), “high ranking”, “large in stature” (Rehg and Sohl 1979:46), “big, great, large” (Abo et al. 1976:190), etc.

We think not much fantasy is needed to imagine that a Marquesan, Hawai’ian or eastern Polynesian term *hane* was formed through Micronesian influence. Later, the prefix *ku-* or *’u-* would have been added to the base in order to stress, emphasise or intensify the quality or status of the numinous phenomenon designated by it. The unprefixated base *hane* for “disembodied person” or “disembodied spirit” became rare, while the prefixed *kuhane* or *’uhane* became the almost exclusive term for the phenomenon.

⁵ See also Kunze (1938:V97-98) and Mergé (1939:276-280). The original German reads as follows: “Ursprünglich Sammelname für Dämonen, Poltergeister, Kobolde, Gnomen usw....In der Volkssage sind die *oni* wilde Bergbewohner, die die Menschen der umliegenden Dörfer, deren Einwohner als *oni* oder *oni*-Nachkommen gelten und sich nicht nur durch seltsame Sitten, sondern auch durch ihren Körperbau von den übrigen Bewohnern der betreffenden Landstriche unterscheiden (Rumpf).” Hammitzsch (1984:1632) designates *oni* as “(böser) Totendämon” [(evil) demon of the dead]. Kenkyusha’s New Pocket Japanese-English Dictionary (Masuda 1990:925) renders *oni* as “ogre” and “fiend”. Another German Japanologist, Klaus Antoni (1987:177-179) refers to Nelly Naumann (1971:60, 64) and Matsuoka Shizuo (1973/76 III:693-694), and favours, on the contrary, the view that the Japanese *oni* ultimately derives from the same PAN etymon as all other terms listed in our Tables 2 and 3.

To postulate this etymology for *kuhane* ('uhane, ku'ane) implies its equation with the other, much more widespread Austronesian term whose Polynesian form is 'aitu (*aitu*), also a derivative of the PAN forms *'anitu' or *hanitu. The limitation of *kuhane* and its variants to only five eastern Polynesian languages seems to hint at a direct Micronesian influence in that region or, at least, in its migratory and cultural radiation centre.

Handy (1927:59), although unable to provide a linguistic analysis or etymology of the term *kuhane* ('uhane), made some interesting remarks on its distribution and its historical or prehistorical implications. After stating the exclusive usage of *kuhane* or 'uhane in the Marquesas and its coincidence with the "synonymous" *wailua* or *vairua* (sic!) in Hawai'i, Mangareva and on Easter Island, he observes: "The fact that *kuhane* as a term for soul was thus spread over the northern and eastern extremes of Polynesia leads to the supposition that it must have been an ancient form. On the other hand, it is possible that it is an intrusive term brought to this region late in Polynesian history. If it is an ancient term, its complete absence from the central and southern region is difficult to explain".

Another of Handy's remarks refers to the population of the hereafter and reads: "The souls of the departed who had been of some consequence in life, after they had reached their ultimate abode usually became what may be called ancestral spirit-gods. This Polynesian concept is well illustrated in the Marquesan stories of the spirit world in which the native terms *kuhane* (soul) and *etua* (god) are often employed interchangeably in speaking of the dwellers of the other world. The relationship between the living in this world and their relatives in the next may be likened to that existing between the older and the younger members of one family" (Handy 1927:89).

Tables 1, 2 and 3, which are not presented for semasiological but for etymological reasons, contain as many extra-Polynesian Austronesian derivatives of the two PAN terms, *'anitu' and *hantu as we were able to gather. Their semantics fit well the above quoted range of connotations provided by Pukui for the Hawai'ian *hane* or 'uhane. If all definitions recorded in the sources are dependable, most of the listed terms denote the postmortal, i.e. disembodied human "soul" or "spirit" or are metonymically applied to the dead as such. Only a minority of them designate (or are supposed to designate) what Fischer (1965:243-254, 255-272, 298-299) calls the "dream ego" and the "spiritual double" and not a single one refers to the "external double" of living persons.

Morphologically, these terms may roughly be divided into four distinct groups. Two of them are due to the two different PAN etyma, *'anitu' and *hantu. Those derived from the first form are present in the Philippines, Micronesia, eastern Indonesia, Melanesia and Polynesia, whereas the derivatives from the second form are mostly restricted to western Indonesia. The other two groups are characterised by their particular form of derivation. One of them comprises *ani* and its variants as the first two syllables, and is typical for Micronesia and eastern Polynesia. The other comprises *nitu* and its variants as the last two syllables, and is present almost everywhere in eastern Indonesia and Melanesia.

The south-western Polynesian derivatives of the PAN etymon, *'anitu', are characterised by the regular elision of the *n* (Kern, J. 1916 V:104; see also Dempwolff 1926:48). Thus, the slightly varied term 'aitu (*aitu*) denoting "disembodied spirits", i.e. "spirits" of the dead, occurs in most parts of Polynesia. Our Table 4 shows its distribution, forms and meanings.

This table requires a few explanatory remarks. As may be seen, variants of the term 'aitu (*aitu*) are present everywhere in Polynesia except in the Marquesas, Hawai'i, Mangareva, and Rapa Nui. While there are no vestiges of it whatsoever in the last two places, apparent evidence of it may be found in the first two. Tregear (1891:6) lists among his comparisons with the Māori term *aitu* the Hawai'ian word *aiku* meaning "to break *tapu*; to do a thing

contrary to ceremony; to eat in an improper manner; to eat standing (*kai-tu*). This was obviously taken from L. Andrews (1974:25) who defines *aiku* as “*ai*, to eat, and *ku*, to stand. Lit. To eat standing. 1. To eat in an improper manner. 2. Fig. To do a thing contrary to rule or ceremony. 3. To break a *kapu*...*Aiku* was an offense against the gods”.

The modern Hawai’ian dictionary by Pukui and Elbert (1986:10) has the correctly spelled entry, *’ai kū*, which is said to mean “to eat freely; to do as one wishes; to break taboos or transgress”. This corresponds doubtlessly with the north-western Marquesan *kaitu* which ought to be spelled *kai tū* and the south-eastern *’aitu* which again should be *’ai tū*. The first is supposed to signify “s’oindre d’odeurs pendant un temps *tapu*; ce qui est défendu” (Dordillon 1904:148, 1931:203), whereas the second means “rusé, astucieux, coquin, esprit fort” or “artificieux...qui enfreint les *tapus* avec hardiesse...celui qui demeure dans les lieux sacrés avec les *tuhuka*” (Dordillon 1904:107, 1931:100) and describes a *petu’e* who is a “filou, fin voleur, trompeur, menteur” or “imposteur, fourbe...chiche, égoïste” (Dordillon 1904:222, 1931:321). The two components of the presumably false compound, *kai* or *’ai* and *tū*, are common Polynesian words. *Kai* or *’ai* signifies “manger” and *tū* means “debout” or “être debout, se tenir debout, se lever, se mettre debout” (Dordillon 1904:106, 146, 274; 1931:98, 200-201, 405-406).

No matter whether the correct form is *’aitū* or *’ai tū*, the literal meaning of the combination is or was originally, as in Hawai’ian, “to eat standing”, and to do this was in many parts of Polynesia strictly *tapu*. It was bad manners and an offense to those present whether human or numinous beings. A person who nevertheless deliberately transgressed this *tapu* deserved to be and certainly was characterised by such insulting epithets and abusive names as recorded by Dordillon. It is hardly conceivable that Tregear could have linked the Hawai’ian expression with the common Polynesian term for a numinous being, especially since he was aware of the significance of the Hawai’ian phrase. At any rate, we feel fully justified in rejecting both the Hawai’ian and the Marquesan expressions as proof of the existence of the terms *aiku* and *aitu* respectively for numinous beings in these languages.

A quite different matter is the alleged existence of a Marquesan term, *aitua*, recorded only by Father Pierre Chaulet, the true compiler of Bishop Dordillon’s dictionary. Interestingly, it is only in the two editions of this excellent work that the term *aitua* is to be found. The definitions given are practically identical. In 1904 (Dordillon 1904:107) *aitua* is said to denote “dieux du paganisme, mauvais esprits” and to signify figuratively “cruel, méchant, démon”. The 1931 definition (Dordillon 1931:100) reads as follows: “dieu des païens; esprits des revenants. Voy. *Paioio*”. The reference to *pa’io’io* defined as an “espèce de divinité” or, more specifically, as a “spectre, fantôme, revenant...Esp. de dieu” (Dordillon 1904:211, 1931:301) speaks in favour of the identity of the Marquesan *aitua* with the extra-Marquesan Polynesian *’aitu* or *aitu*. What makes this term suspicious, however, is the final *a*. If it were a suffix changing nouns into qualitatives or stative verbs indicating the presence or even an abundant supply of what the noun denotes, the Marquesan *aitua* might be identical with the Samoan word *aitua* meaning “to be haunted”, i.e. by *aitu*, (Pratt 1878:97, 101; Milner 1966:1, 12, 380) but neither Dordillon’s dictionary nor Zewen’s (1987) Marquesan grammar mention such a possibility in the Marquesan language.

Our solution to the problem, which apparently was never felt to be one, is perhaps unusual but, most probably, adequate. As indicated above by speaking of the “alleged existence” of the term *aitua* in Marquesan, we doubt its existence altogether. Although the value of the Marquesan dictionary can hardly be overestimated, it must be kept in mind that it was made under extremely primitive and difficult conditions which may explain its relatively few shortcomings. With all due respect and admiration for the compilers, we have no

compunction in identifying another possible and quite natural source of errors, which has been and still is very evident in all sorts of Polynesian writings. We refer to the fact that not all investigators are able to free themselves from the peculiar phonetics of their mother tongues. Obviously, Chaulet and Dordillon did not have this problem. But *aitua* appears to be one of the very few cases, perhaps the only one, attesting to a confusion of the French phoneme *ai* and its Marquesan equivalent *e*. Hence our conclusion that the alleged Marquesan *aitua* is, in reality, *etua*.

According to Dordillon *etua* means "Dieu; divinité...devenir dieu", and the illustrating sentences disclose the kind of divinity which is meant. It says: "'*Ia mate te 'enana, 'a tahi 'a etua*": "lorsque l'homme est mort, c'est alors qu'il devient Dieu" and: "'*Ia mate te hakā'iki, 'u etua*": "lorsqu'un chef meurt, il devient dieu" (Dordillon 1904:119, 1931:132). The Marquesan *etua* then, were spirits of the dead and hence semantically identical with *kuhane* ('*uhane*) and '*aitu* (*aitu*), terms which, again, are etymologically identical.

If our conclusion is correct, and we are convinced it is, the four most eastern Polynesian regions, the Hawai'ian, the Marquesan, the Mangarevan and the Rapa Nui, have *kuhane*, '*uhane* or *ku'ane*, whereas the others have '*aitu* or *aitu*. The only region where, due to its geographical position between Tahiti and the Marquesas, both terms occur, are the Tuamotus.

4 Conclusion

In summary, our conclusion is that the two Polynesian terms, *hane* (*kuhane*, '*uhane*, *ku'ane*) and '*aitu* (*aitu*), are derivatives of the same PAn etymon, **'anitu*' (**hanitu*), and thus etymologically and semantically identical. Therefore they do not coexist in the same regions. *Kuhane* and its variants are indiscriminately applied everywhere to both the "soul" of a living person, i.e. his or her "dream ego" or "spiritual double", and the "disembodied spirit" of a dead person. This was also the case on Rapa Nui, even though it is more frequently applied there to the "soul" of a living human being. If the term *kuhane* is used instead of *akuaku* and *vārua* for the "spirits" of the dead, this usage constitutes a metonymical extension, because, after all, the difference between the *akuaku* or *vārua* of a person and his or her postmortal *kuhane* is a situational one rather than one of principle. There is, however, a difference between the terms in their formation and etymology.

Table 1: Possible cognates in Micronesian languages

PAn	* <i>'anitu</i> '	separated soul	Dempwolff 1938; see also 1926
	* <i>hanitu</i>	separated soul	Dempwolff 1926
	* <i>'a(nñ)itu</i>	spirit, soul	Blust 1972; see also Wurm & Wilson 1975
	* <i>'antuh</i>	ghost	López n.d., see also Wurm & Wilson 1975
	* <i>'antu(h)</i>	spirit, soul	Dyen 1953; Wurm & Wilson 1975
	* <i>'antu</i>	ghost	Blust 1972
	* <i>hantu</i> '	phantom	Dempwolff 1938; see also 1926
	* <i>nitu</i>	phantom	Dempwolff 1926
	* <i>nitu</i>	image-soul	Stresemann 1927

PTS	<i>*iNicu</i>	spirit, soul	Li 1972; see also Wurm & Wilson 1975
PPH	<i>*'anitu</i>	spirit, soul	Zorc & Charles 1971, see also Wurm & Wilson 1975
	<i>*'aNtu(h)</i>	ghost	Zorc & Charles 1971, see also Wurm & Wilson 1975
POc	<i>*'a(nñ)itu</i>	ghost	Blust 1972; see also Wurm & Wilson 1975
	<i>*'anitu</i>	ghost	Blust 1990
Palau	<i>óni</i>	demon (Jap.)	McManus 1977
	<i>chalíd</i>	idol	Walleser, P. 1913 I
	<i>chelíd</i>	god, deity, spirit	McManus 1977
	<i>galíd</i> (sic!)	everything divine; sky, district, village and family gods	Krämer 1926; Böhme 1937
	<i>galid</i> (kalid)	spirit	Kubary 1888
	<i>kalith</i> (sic!)	god	Ferreira 1987
	<i>ériz</i>	spirit	Eilers 1935
	<i>ériz</i>	soul, spirit	Eilers 1935
	<i>ériz</i>	spirit, god	Eilers 1935
	<i>eārus̃i</i>	spirit of the dead	Eilers 1936
Merir Pur, Pulo Anna Sonsorol, Songosor Tobi	<i>yari</i>	ancient heroes	Christian 1899
	<i>jāres</i> (sic!)	soul = demon	Krämer 1917; see also Eilers 1936
	<i>jāres</i> (sic!)	god	Krämer 1917; see also Eilers 1936
	<i>Yarris</i> (sic!)	(god)	Holden 1975; see also Eilers 1936
	<i>l̃aris</i> (sic!)	deity	Eilers 1936
	<i>Sāg̃its</i> (sic!)	deity of Sorol	Eilers 1936
	<i>gālis</i> (sic!)	spirit house; probably another version of <i>Yarris</i> , <i>Sāg̃its</i> , <i>l̃āres</i>	Eilers 1936
	<i>kān</i> (khan)	spirit of the dead, nature spirit	Walleser, C. 1913; Müller 1917/18 I
	<i>kaan</i>	demon, evil spirit	Jensen, J. 1977
	<i>ya'an</i>	picture, form, appearance, image, soul, spirit of... (> <i>ya'ag</i>)	Jensen, J. 1977
Yap	<i>yä'āl</i>	image, ghost, spirit	Jensen, J. 1977
	<i>thagith</i>	spirit that appears through a person, familiar spirit	Jensen, J. 1977
	<i>z̃ag̃íz̃</i>	soul, spirit of dead elders, adult children or brothers and sisters; ancestors = <i>kaan</i>	Walleser, C. 1913; Müller 1917/18 I
	<i>Yānalb</i>	<i>kaan</i> of Gachpar	Walleser, C. 1913
	<i>Yongelap</i>	great spirit; ruler of the universe	Krämer 1937
	<i>ialus</i>	spirit (of the dead); "super- human beings who lack human origins...demons"; (sky gods)	Lessa 1986
Ulithi	<i>lalulep</i>	"great spirit of the Sky World"; "the greatest <i>ialus</i> "	Lessa 1986

		who judges "the fresh spirits of the dead" (<i>ialus</i>)	
Mogemog, Ulithi	<i>Longolap</i>	"great ghost", i.e. "lineage ghost"	Lessa 1986
	<i>ellüth</i>	shooting star (flying spirit)	Damm 1938
	<i>Eluelap</i>	king of heaven	Damm 1938
	<i>Yonelāp</i>	mythical figure, son of the woman Bagáu	Damm 1938
Woleai	<i>yalius</i>	ghost, spirit, god	Sohn & Tawerilmang 1976
	<i>Yaliulap</i>	name of a legendary king of the sky	Sohn & Tawerilmang 1976
	<i>alus</i> (sic!)	(spirit, god)	Krämer 1937
Fais	<i>Alúelap</i>	creator of (W)Oleai	Krämer 1937
	<i>alús</i>	spirit, god	Krämer 1937
	<i>ēlulap</i>	deity	Krämer 1937
Sorol	<i>ēlūs</i>	spirit	Eilers 1936
	<i>ēllūs</i> (sic!)	spirit of the dead	Damm 1938
Aurepik	<i>ällūs</i> (sic!)	spirit of the dead	Damm 1938
	<i>Älülöb</i> (sic!)	king of the sky	Damm 1938
	<i>Yānelap</i>	great spirit in Gachpar, Yap	Damm 1938
Faraulip	<i>Alüelāp</i> , <i>Eluelap</i>	being half human half fish in the sky, where "good" spirits of the dead live, while the "bad" ones are burned	Damm 1938
	<i>Yonelāf</i>	a demon, originally a great king on Yap	Damm 1938
Ifaluk	<i>alús</i>	ghost, god, demon, spirit of a dead person	Spiro 1952; Burrows & Spiro 1953
	<i>Äluelöp</i>	king of the sky	Damm 1938
Lamotrek	<i>alus</i>	god	Krämer 1937
	<i>Alúelap</i> , <i>Elüelap</i>	great spirit; ruler of the universe	Krämer 1937
Satowal	<i>jälü</i>	spirit	Damm & Sarfert 1935
Truk	<i>énú</i> , <i>anú</i>	god, spirit, spirit of the dead, ghost	Goodenough & Sugita 1990
	<i>jěny</i>	spirit	Dyen 1949
Puluwat	<i>ānū</i>	good spirit	Damm & Sarfert 1935
	<i>yaanú</i>	god (pre-Christian)	Elbert 1972
	<i>yanú</i>	ancient god	Elbert 1972
	<i>Yanúlap</i>	name of a god living in the sky, lit. great god	Elbert 1972
Námōluk	<i>ánū</i>	spirit of the dead	Girschner 1911; Krämer 1935
Mortlock	<i>anu</i>	demon, "phantasma", "Theos"	Dempwolff 1926
Ponape	<i>eni</i>	ghost, usually considered malicious	Rehg & Sohl 1979
	<i>āni</i>	guardian spirit, ghost of an ancestor	O'Connell 1929; Hambruch & Eilers 1936

	<i>āni</i>	disembodied spirit, from the spirit of the meanest individual just deceased to spirits self-created; the dead; ancestor; a god; ghost	Gulick 1880; see also Dempwolff 1926
	<i>ani (w)oj</i>	a spirit who grew or existed spontaneously; the highest order of spirits (yet sometimes this idea becomes confused, and the spirit of a person occasionally is so promoted in the heavenly regions that he is said to become an <i>ani woj</i>)	Gulick 1880
	<i>āni uōš</i>	eternal, uncreated god <i>uos = os</i> "sprout, grow" eternal, uncreated demons; personified natural phenomena	Hambruch & Eilers 1936 Rehg & Sohl 1979 O'Connell 1929
	<i>āni aramāš</i>	souls of the deceased, who haunt at night	O'Connell 1929
	<i>āni aramāš</i>	deified ancestor	Hambruch & Eilers 1936
	<i>āni mas</i> ⁶	ghost of a chief, especially powerful	Hambruch & Eilers 1936
Mokil	<i>eni</i>	demon, ghost	Harrison & Albert 1977; see also Eilers 1934
Pingelap	<i>āni</i>	spirit	Eilers 1934
Kusaie	<i>inut</i>	god, spirit, ghost	Lee 1976
	<i>ānūt</i>	spirit, deity	Sarfert 1920
	<i>enut</i>	ancestral spirits	Christian 1899
Chamorro, Marianen	<i>aniti</i>	devil, satan	Topping, Ogo & Dungca 1975
	<i>anti</i>	soul, spirit, ghost	Topping, Ogo & Dungca 1975
Carolinian, Sw. Saipan	<i>alú</i>	spirit, ghost; may be evil or helpful (POc * <i>anitu</i>)	Jackson & Marck 1991
Carolinian, Nw. Saipan	<i>anú</i>	spirit, ghost; may be evil or helpful (Tanapag dial.)	Jackson & Marck 1991
Marshall	<i>anij</i>	ghost, spirit, phantom	Erdland 1914
	<i>(h)anij</i>	god	Abo et al. 1976
	<i>(h)an</i>	his, her soul	Abo et al. 1976
Nauru ⁷	<i>āni</i>	soul, spirit, spirit (soul)	Hambruch 1914/15; Brandeis 1907
	<i>eāni</i>	spirit of deceased relatives	Hambruch 1914/15

⁶ The epithet *mas* as used by Hambruch and Eilers (1936:115) has not been found in any of the sources. Regh and Sohl (1979:56, 59) give *mahs*, cf. *mese* "face, facade; upper part of yam, taro, pineapple, etc.; edge of a reef", with meanings like "face" or "first" respectively, so that *ani* or *eni mahs* could mean as much as "first" or "foremost", i.e. principal spirit.

⁷ Unfortunately, no reliable Nauruan dictionary is available to us. Kayser (1917/18:315) is certainly right when he states: "Hambruch verstand von der so schwierigen Nauru-Sprache soviel wie gar nichts" ("Hambruch understood precious little of the very difficult Nauru language"). Accordingly, his references to the concepts of soul and spirit are confusing. The comparison of *āni* 'soul, spirit', *e āni* 'spirit, demon', *eāni* 'spirit of deceased relatives', *āni* 'spirit (soul)', *ānū* 'soul', is anything but enlightening!

Gilbert	<i>ānū</i>	soul	Hambruch 1914/15
	<i>ānnū</i> (sic!)	(my) soul	Kayser 1917/18
	<i>anti</i>	god, spirit, ghost, phantom, spectre, demon, devil	Sabatier 1971
	<i>te anti ma aomata</i>	human hero become god, spirit	

Table 2: Possible cognates in Western Austronesian languages

Malay	<i>alus = halus</i>	delicacy, fineness of texture...	Wilkinson 1959
	<i>orang halus</i>	impalpable fairy folk; departed spirits	Wilkinson 1959
Indonesian	<i>hantu</i>	evil spirit, ghost	Wilkinson 1959
	<i>halus</i>	fine, tender, soft; sensitive, subtle, refined, spiritual, immaterial	Karow & Hilgers-Hesse 1962
	<i>alus</i>	fine, delicate; see <i>halus</i>	Karow & Hilgers-Hesse 1962
	<i>orang halus</i>	spirit, spectre	Karow & Hilgers-Hesse 1962
	<i>hantu</i>	ghost, (evil) spirit	Karow & Hilgers-Hesse 1962; see also Pino & Wittermans 1966
Greater Sundas and adjacent islands			
Simalur, west & east Simalur	<i>antu</i>	demon	Kähler 1961
Sichule	<i>hantu</i>	evil spirit, demon, ghost	Kähler 1961
	<i>hantu</i>	demon	Kähler 1959
Lekon, Sichule, central Simalur	<i>antu</i>	demon	Kähler 1961
Nias	<i>adu</i>	demon	Kähler 1961
Mentawai Islands	<i>nitū</i>	ghost, spirit of a dead person	Friederici 1913
	<i>šī (a)nitū</i>	spirit of a dead person	Lafeber 1914
	<i>šanitu</i>	soul of the dead, phantom	Dempwolff 1926
Enggano	<i>hantu</i>	(evil) spirit	Stokhof 1987b
Aceh, north Sumatra	<i>hantu</i>	demon	Kähler 1961
	<i>hantu, euntu</i>	evil spirit causing sickness	Djajadiningrat 1934
	<i>euntèè', ntèè'</i>	spook, spectre, spirit	Djajadiningrat 1934
	<i>éntu</i>	forefather, (founding) ancestors	Djajadiningrat 1934
	<i>antu</i>	ancestor	Dempwolff 1926; see also Langen 1889
	<i>euntèè'</i>	ancestor, footprint	Lafeber 1914
	<i>hantu</i>	spook, phantom	Hazeu 1907
Gayō, north Sumatra	<i>hantu b^eburu</i>	dangerous <i>hantu</i> who often causes death	Hazeu 1907
Toba Batak, north Sumatra	<i>antu</i>	= Mal., <i>hantu</i>	Warneck 1977
Batak, north Sumatra	<i>nitū</i>	ghost, spirit of a dead person	Friederici 1913
Batak, Mandailing, north Sumatra	<i>àntu</i>	ghost	Stokhof 1986b

Ulu, Asahan, Labuhan Batu, east Sumatra	<i>hantu</i>	vampire (witch, werewolf)	Stokhof 1986b
Minangkabau, central Sumatra	<i>hantu</i>	demon	Kähler 1961
	<i>antu</i>	ghost	Stokhof 1987a
	<i>antoe djâhe'</i>	evil spirit	Stokhof 1987a
Batam, Riau-Lingga Islands	<i>antu</i>	phantom, apparition	Schot 1882/83
Sundanese, west Java	<i>hantu</i>	certain evil spirit (which cannot be described in more detail)	Coolsma 1913
	<i>hantu g^eni</i>	fire spook	Coolsma 1913
	<i>keuna hantu</i>	have a sickness caused by a spirit (lit. spirit-stricken)	Coolsma 1913
	<i>hantu</i>	kind of evil spirit, spook (pursues esp. new-born children; flies around at night in the shape of a glowing goldfish, coconut leaf or snake; one who is touched by it must die)	Eringa 1984
Old Javanese	<i>hanitu</i>	evil powers?	Zoetmulder 1982
	<i>hantu</i>	to die, dead, extinguished; death	Zoetmulder 1982
	<i>kahantu</i>	to swoon	Zoetmulder 1982
Javanese	<i>antu</i>	ghost, spirit	Herrfurth 1972
		(dial., obs.) (evil) spirit	Pigeaud 1989
		(lit.) death, dead	Pigeaud 1989
Dayak, Borneo	<i>hantu</i>	ghost, phantom	Hardeland 1859
Iban (Sea Dayak), Sarawak, Borneo	<i>antu</i>	spirit	Hose & McDougall 1993 II
Ngaju Dayak, south Borneo	<i>hantu'</i>	corpse, carrion	Dempwolff 1938
	<i>hântuen</i>	evil spirits	Dempwolff 1938
	<i>hantuen</i>	vampire (witch, werewolf)	Stokhof 1986a
Ma'anyan, south Borneo	<i>hantu'en</i>	evil spirit	Stokhof 1986a
Sangihé, Sangihé Islands	<i>antung</i>	name of sea spirits, <i>setang u laude</i> , and the diseases caused by them...see also <i>ompung</i> : sea spirits; lord, honourable person of rank; <i>upung</i> (^e <i>mpung</i>): forefather, ancestor	Steller & Aebersold 1959
Bolaang Mongondow, Manado, north-east Celebes	<i>alus</i>	(Mal.), fine, delicate; word often used for <i>dimukut</i> : ghost, esp. when speaking of dead family members	Dunnebie 1951
Tontoli, north Celebes	<i>hantu (mádais)</i>	evil spirit	Stokhof 1983
	<i>hantu mapido</i>	spirit	Stokhof 1983
Bada', central Celebes	<i>anditu</i>	spirit	Kern, R. 1956
Banggai, central Celebes	<i>alus</i>	soul, spirit, ghost	Stokhof 1985
	<i>onitu</i>	the deceased	Stokhof 1985
Bare'e, central Celebes	<i>anitu</i>	spirits of fallen heroes, village protectors including its founder; spirits in general dwelling in the <i>lobo</i> = village temple or in the forge	Adriani 1928

	<i>kantu</i>	pungent magic potion charmed someone's body to make him sick	Adriani 1928
		ghost	Lafeber 1914
Mori, central Celebes	<i>onitu</i>	soul, spirit, ghost	Stokhof 1985
Padoe, central & south Celebes	<i>onitu</i>	evil spirit	Stokhof 1985
Kendari, south-east Celebes	<i>sanggoleo</i> <i>pewowu-nito</i>	soul, spirit (disappears into the earth)	Stokhof 1985
	<i>sanggoleo</i> <i>nitu</i>	soul, ghost	Stokhof 1985
Tolelaki, Kendari	<i>onitu</i>	ghost	Stokhof 1985
	<i>onitu wali</i>	spirit (= <i>sanggoleo</i>)	Stokhof 1985
	<i>onitu mosaa</i>	evil spirit	Stokhof 1985
Wawonii, Wawonii & Menui Islands south Celebes	<i>onitu</i>	ghost	Stokhof 1985
Mekongga, south-east Celebes	<i>onitumate</i>	soul, ghost	Stokhof 1985
Wolio, south Buntung, Selayar, south Celebes	<i>hantu</i>	ghost, spectre	Anceaux 1987
Makassar, south-west Celebes	<i>antu, ntu</i>	that (demonstrative pronoun of the 2nd person) (= Mal. <i>itu</i>)	Cense & Abdoerrahim 1979; Matthes 1859
Lesser Sundas			
Sasak, Lombok	<i>hantu,</i> <i>kahantun</i>	spirit of a dead person	Lafeber 1914
Bima, east Sumbawa	<i>hentjà</i>	ghost	Elbert, J. 1911/12 II
Sumba	<i>nitu</i>	ghost	Roo van Alderwerelt 1891
Savu	<i>nitu</i>	ghost	Lafeber 1914
Manggarai, west Flores	<i>nitu</i>	< <i>oné itu</i> ; there, yonder	Verheijen 1967; see also Kern, R. 1956
	<i>nitu</i>	at that moment, since (that time)	Verheijen 1967
	<i>nituk</i>	at that moment, since (that time)	Verheijen 1967
	<i>nditu</i>	there, yonder	Verheijen 1967
Lio (Aku), central Flores	<i>nitu</i>	nature spirit	Arndt 1933a
	<i>nitu lovo</i>	brook spirit, water-sprite	Arndt 1933a
	<i>nitu puü</i> <i>kadzu</i>	tree spirit	Arndt 1933a
	<i>nitu vatu</i>	stone spirit	Arndt 1933a
	<i>nitu pai' kai</i>	one's guardian spirit	Arndt 1933a
	<i>nitu yava lovo</i>	red dragon-fly	Arndt 1933a
Ngada, central Flores	<i>nitu</i>	earth spirit, soul of a dead	Arndt 1929, 1961
Sika, central Flores	<i>nitung</i>	ghost	Calon 1890/91
	<i>nitu</i>	guardian spirit	Calon 1897
		souls of the dead;	Arndt 1933b
		ghost of bad person	
Solor	<i>nitun</i>	guardian spirit	Leemker 1893
Bakan, (Informant) central Lembata	<i>nitu</i>	spirit with six fingers and toes and a hole in the back	Dori W. Hendrikus

Roti	<i>nitu</i>	ancestral spirit; devil	Jonker 1908
	<i>nitu bei-bai</i> ,	ancestral spirit	Jonker 1908
	<i>nitu uma</i>		
	<i>nitu mula</i>	all sorts of devils and spirits	Jonker 1908
	<i>nitu dea</i>	bush devil	Jonker 1908
	<i>nitu-taok</i>	a possessed (person)	Jonker 1908
	<i>nitu malidak</i>	winged devil, spirit	Jonker 1908
	<i>nitu uma</i>	soul of a recent dead (lit. soul in the house, i.e. house of mourning)	Stresemann 1923
	<i>nitu dea</i>	deified soul of ancient dead	Stresemann 1923
	<i>nitu mula</i>	ancestral spirit	Stresemann 1923
	<i>nitu-bebaai</i>	soul of a recent dead	Heijmering 1843/44
	<i>nitu-sesongo</i>	soul of an ancient dead	Heijmering 1843/44
	<i>-faiks</i>		
	<i>nitu</i>	ghost, apparition	Kern, J. 1893; Kleian 1894
		devil, satan	Kern, J. 1893
Timor	<i>nitu</i>	ancestral spirit	Riedel 1889
	<i>bivren-nitu</i>	recent dead	Heijmering 1845
	<i>buiten-nitu</i>	ancient dead	Heijmering 1845
	<i>nitu</i>	changed soul of a dead person	Bastian 1884/94 II
North Moluccas			
Sula Islands	<i>nitu</i>	ghost, spirit of a dead person	Friedrici 1913
Central Moluccas			
Buru	<i>nitu</i>	spirit of one died from sickness or at home	Wilken 1875; Schut 1920
	<i>nitu</i>	shadow of a dead person	Hendriks 1897
Kayeli, Buru	<i>nitu</i>	spirit; ghosts of deceased parents	Stokhof 1982b
Tifu, Buru	<i>nitu</i> , pl.	soul	Stresemann 1927
	<i>nitoro</i> , <i>nitor</i>		
Masarete, south Buru, Ambon	<i>nitu</i>	corpse	Stokhof 1982b
	<i>nitu esmangen</i>	ghost	Stokhof 1982b
	<i>nitu èsmangin</i>	soul, ghost	Stokhof 1987c
	<i>hantu</i>	evil spirit	Stokhof 1987c
Melayu Ambon	<i>hantu</i>	ghost	Stokhof 1982a
Ambon & Haruku	<i>nitu</i>	soul of a dead person, ghost	Riedel 1886
		ghost	van Hoëvell 1877
		ghost	van Ekris 1864/65
Pelauw, Haruku, Uliase	<i>nitu</i>	evil spirit; ancient war leaders; appearing as human, animal, etc., to the <i>tuan tanah</i> (lord of the land) only	Stokhof 1982a
Saparua, Uliase	<i>nitul</i>	ghost, devil	van Ekris 1864/65
Ou, Saparua	<i>nitul</i>	ghost	Stokhof 1982b
	<i>nitu</i>	spirit	Stokhof 1982b
Ihamahu, Saparua	<i>nitu</i>	spirit	Stokhof 1982b
Nusa Laut, Uliase	<i>isopànitul</i>	idol	Stokhof 1982b
	<i>nitul</i>	ghost, devil	van Ekris 1864/65

	<i>niu</i>	ghost, devil	van Hoëvell 1877
	<i>nituo</i>	ghost, evil spirit	Stokhof 1982b
Nalahia, Nusa Laut	<i>niul</i>	ghost, evil spirit	Stokhof 1982b
Seram	<i>nitu</i>	a dead, deceased	Stresemann 1923
Sapolewa, Seram	<i>nitu</i>	spirits of the ancestors	Stokhof 1981
Alune, west Seram	<i>nitu-nitu</i>	soul, ghost	Stokhof 1981
	<i>nitumatale</i>	the deceased	Stokhof 1981
Rumakai, west Seram	<i>nituwa</i>	ancestor, idol	Stokhof 1982a
Piru, west Seram	<i>nitu-nitu</i>	idol	Stokhof 1982a
Paulohi, west Seram	<i>nitu</i>	soul	Stresemann 1927
Elpaputih, west Seram	<i>matale nitu</i>	corpse	Stokhof 1981
Wemale, west Seram	<i>nitu</i>	ghost, spirit, divine character; identical <i>iola</i> : spirit of the dead	Jensen, A. 1948
	<i>ula-nitu</i>	spirit mountain	Stresemann 1927
Sepa, south Seram	<i>nitu</i>	soul of dead	Stresemann 1927
Seram Laut & Gorong Islands	<i>nitu</i>	soul of a dead person	Riedel 1886
	<i>nitu wouwou</i>	soul of a recent dead	Riedel 1886
	<i>nitu malmal</i>	soul of an ancient dead, ancestor	Riedel 1886
Watubela Islands	<i>kênitu</i>	spirit of a dead person	Riedel 1886
	<i>kênitu dawatan</i>	ancestor	Riedel 1886
	<i>kênitu bêlaban</i>	great-great-grandparent, ancestor	Riedel 1886
South Moluccas			
Let(t)i Island	<i>nitu</i>	spirit, ghost	Kern, R. 1956
Peraï, Wetar	<i>nitu</i>	vampire (witch, werewolf)	Stokhof 1987c
Kisar	<i>nitu</i>	dead, deceased	Riedel 1886
Tanimbar	<i>nitu</i>	dead reaching the land of the dead	Riedel 1886
Kei Islands	<i>nitu</i>	human shadow, surviving death as a ghost in human shape	Pleyte 1893
Vietnam			
Bahnar	<i>nitung</i>	ghost	Lafeber 1914
Philippines			
Bikol, south Luzon, Masbate, Catanduanes	<i>anító</i>	ancestral spirit	Mintz 1971
Iloko, north Philippines	<i>anito</i>	spirit, ghost of ancestor	Constantino 1971
Lepanto Igorot (Kankanay)	<i>anító</i>	spirit	Vanoverbergh 1933
	<i>anito</i>	ancestors, (malevolent) spirits of the underworld	Sacla 1987
Bontok, Luzon	<i>anito</i>	ghost, spirit or soul of the departed	Clapp 1908
	<i>anító</i>	spirit of an ancestor, any spirit	Reid 1976; see also Kern, R. 1956
Ibanag, Luzon	<i>anito</i>	spirit of an ancestor, any spirit	Kern, R. 1956
Pangasinan, Luzon	<i>aníani</i>	apparition, ghost, spirit	Benton 1971
Tagalog, Luzon, Mindoro	<i>anító</i>	deity, idol	Ramos 1971
Kapampangan, Luzon	<i>anito</i>	ghost, spirit	Kern, R. 1956

Batad Ifugao, northern Luzon	<i>aninitu</i>	embodied place spirit, <i>pinādeng</i> , which takes the form of an animal, bird or person; seen at night in and around villages	Newell & Polygon 1993
Negrito, Luzon	<i>anito</i> , <i>anitu</i> , <i>nito</i>	souls of the departed	Garvan 1963
	<i>anitoan</i> , <i>anitudan</i>	medium, magician, healer	Garvan 1963
	<i>manganito</i>	shaman	Schebesta 1957; see also Garvan 1963; Demetrio 1991
Agta, central Cagayan, northern Luzon	<i>anituq</i> ⁸	spirit of a man; name of evil spirits	Oates & Oates 1955
Tina Sambal, central Luzon	<i>ani-ani</i> ⁹	ghost	Elgincolin et al. 1991
	<i>ani-aniwón</i>	to haunt	Elgincolin et al. 1991
Manobo, Mindanao	<i>anit</i>	system of taboos regulating incest and talking to, laughing at, or mocking animals	Elkins 1968
Mansaka, Mindanao	<i>anito</i>	to chant a prayer to spirits	Svelmoe & Svelmoe 1990
Taiwan			
Taroko	<i>lito</i>	ghost	Lafeber 1914
Bunun	<i>'anitu</i>	ghost	Blust 1972
Tsou	<i>hicu</i>	soul	Li 1972
Saaroa	<i>ilicu</i>	soul	Li 1972

Table 3: Possible cognates in Melanesian languages

Papua New Guinea

Iatmul, east Sepik	<i>kait</i>	(dream ego)	Bateson 1931/32
Gedaged, Madang	<i>nitun</i>	(dream ego, spirit of the dead)	Mager 1952
Bilibil, Madang	<i>ngitun</i>	(dream ego, spirit of the dead)	Mager 1952
Takia, Madang	<i>ngutun</i>	(dream ego, spirit of the dead)	Mager 1952
Rivo, Madang	<i>niun</i>	(dream ego, spirit of the dead)	Mager 1952
Megiar, Madang	<i>ngutun</i>	my reflected image	Kaspruš 1942/45
	<i>ngutuk</i>	ghost	Kaspruš 1942/45
Rai Coast, Madang	<i>tamol annus</i>	ghost	Schmitz 1959
Langtub, Madang, Maclay Coast	<i>anut</i>	ghost	Dempwolff 1905
Jabêm (Yabem), Morobe	<i>Anôô</i>	name of one of the spirits of former owners of tribal ground/ places; name of the living God, the creator of the universe	Streicher 1982
Tami, Morobe	<i>anuto</i>	god	Bamler 1900
	<i>kani</i>	spirit of the dead	Bamler 1900

⁸ In Central Cagayan Negrito (Oates and Oates 1955:II) the letter *q* symbolising the glottal stop is retained here, whereas in all other cases it is replaced with a hamza.

⁹ Word medial glottal stop in the Tina Sambal Dictionary (Elgincolin et al. 1991) is symbolised by a hyphen.

Siassi, Morobe	<i>ānūtūād</i>	evil spirit	Dempwolff 1905
Komba, Morobe	<i>anitu</i>	ghost	Laufer 1960/61
Umboi, Morobe	<i>kon</i>	ghost	Chinnery 1928
Muyuw, Woodlark, Milne Bay	<i>āluw</i>	bush spirit	Lithgow & Lithgow 1974
	<i>aluwan</i>	spirit	Lithgow & Lithgow 1974
	<i>yēluw</i>	spirit of a dead person, ancestral spirit	Lithgow & Lithgow 1974
Manus	<i>palit</i>	spirit of the dead	Fortune 1969
	<i>belt</i>	spirit of the dead	Fischer 1965
St. Matthias, New Ireland	<i>katu</i>	evil spirit	Nevermann 1933
Lavongai, New Ireland	<i>ālēlīn</i>	ghost, spirit of a dead person	Friederici 1913
	<i>ēnurmāân</i>	spirit	Friederici 1913
Siar, New Ireland	<i>kenit</i>	spirit of the dead	Parkinson 1907
Tangga, New Ireland	<i>kinit</i>	spirit of the dead	Bell 1933/34
Kilenge, New Britain	<i>na itu</i>	soul	Friederici 1913
Bariai, New Britain	<i>antu</i>	spirit of a dead person	Friederici 1912, 1913
	<i>antzu</i>	soul of an evil dead	Laufer 1960/61
Karore, New Britain	<i>pu-kani</i>	(his) soul	Goodenough 1961
Mangsing, New Britain	<i>ōni-ka</i>	(my) soul	Goodenough 1961
Solomon Islands			
Mono-Alu, Shortland Islands	<i>nitū</i>	ghost of once-living person; any fantastic or legendary creature	Wheeler 1912
	<i>nitū paitena</i>	evil <i>nitū</i> (also called <i>ialele</i> , <i>sakusaku</i> or <i>ome</i>)	Wheeler 1912
Kilokaka, Santa Isabel	<i>naaitu</i>	same as <i>tamate</i> (Mota); ghost, dead, corpse	Napu 1953; see also Codrington 1891
Sa'a, Malaita	<i>li'oa</i>	ghost, spirit of a dead person	Codrington 1891; Ivens 1929; Friederici 1913
Vanuatu			
Torres Islands	<i>nete</i>	soul	Codrington 1891
Fiji			
Bau	<i>yalo</i>	soul, ghost, spirit	Hazlewood 1872; Capell 1957
	<i>yalo bula</i>	spirit which leaves a man's body when still alive, but generally when asleep	Hazlewood 1872
	<i>yalo ni mate,</i> <i>yalo ni moku</i>	the spirits of the dead or slain	Hazlewood 1872
	<i>yalo ni tina</i> <i>ni gone</i>	spirit of a woman who dies in childbed	Hazlewood 1872
	<i>yaloqase</i>	wise, prudent (= <i>yalomatua</i>)	Hazlewood 1872
Bau, Nadroga	<i>kalou?</i>	ghost, spirit of the dead, spirit, god	Hazlewood 1872; Biggs 1953
Nadroga	<i>nitū</i>	instead of <i>kalou</i>	Hocart 1915c; Biggs 1953; Kern, R. 1956
Yasawa, Ra	<i>anitu</i>	(god)	Churchward 1940

western Fijian	<i>yanitu</i>	ancestral spirit	pers.comm.; see also Geraghty 1983
	<i>manumanu</i>	spirit animal (= <i>manumanu</i>	Hocart 1914, 1915c ¹⁰
	<i>yanitu</i>	<i>kalou</i>), spirit	

Table 4: Possible cognates in Polynesian languages¹¹

PPN	* <i>aitu</i>	ghost, spirit	Biggs 1979
West Futuna-Aniwa, Vanuatu	<i>fegaitu</i>	sorcerer, wizard	Dougherty 1983
Aniwa, Vanuatu	<i>fengeitu</i>	sorcerer	Capell 1984
Rennell, Solomon Islands	<i>'aitu</i>	worshipped deity, god, esp. the district gods	Elbert 1975; MacGregor 1943
Sikaiana, Solomon Islands	<i>aitu</i>	spirit	Capell 1936/37; Hogbin 1940
	<i>éitu</i>	ancestral spirit	Sarfert & Damm 1931
Luangiua, Ontong Java, Solomon Islands	<i>éitu</i>	ancestral spirit	Sarfert & Damm 1931
	<i>aiku</i>	god	Ray 1917
	<i>aiku</i>	spirit of the dead, sometimes for <i>kipua</i>	Hogbin 1934, 1940
Nukumanu, Tasman Islands, PNG	<i>éitu</i>	ancestral spirit	Sarfert & Damm 1931
	<i>aitu</i>	ancestral spirit	Hogbin 1940
Takū, Mortlock Islands, PNG	<i>aitu</i>	ancestral spirit	Hogbin 1940
Kapingamarangi	<i>eidu</i>	spirit, ghost, monster, ancient deities, spouse's kin, affines	Lieber & Dikepa 1974
	<i>eeitu</i>	ghost, spirit	Biggs 1979
	<i>aitu</i>	demon	Ray 1915
Nukuoro	<i>eidu</i>	ghost, spirit, god	Carroll & Soulik 1973
	<i>aitu</i>	ghost, spirit of a dead person	Kubary 1900
	<i>eitu</i>	god, spirit	Christian 1898
Tūvalu	<i>aitu</i>	family spirit, spirit of the dead	Koch 1963
		spirit, god, ghost	Noricks 1981
Nanumea, Tūvalu	<i>aitu</i>	family spirit in animal form which helped the family by providing omens and making predictions; ghost; fairy	Ranby 1980
Rotuma	<i>'qitu</i>	spirit, sometimes ghost	Hocart 1915a, 1915b
		god, object of worship	Churchward 1940
	<i>fak'qitu</i>	divine(ly)	Churchward 1940

¹⁰ See also Chowning (1991:60-61); Fischer (1965:154, 348-364); Friederici (1913:55, 92-93); Körner (1936:140-155).

¹¹ See also the protoforms at the beginning of Table 1.

	<i>sa'aitu</i>	class or company of supernatural beings formerly believed in and looked to for help esp. in time of war... spirits of men who had died uncircumcised	Churchward 1940, 1938/39
	<i>sur'aitu</i>	to die in childbirth (?)	Churchward 1940
	<i>surne'aitu</i>	exceptionally handsome or beautiful or clean-living person (obs.)	Churchward 1940
	<i>tō'āk 'aitu</i>	to utter oracles or messages from the gods	Churchward 1940
Tokelau	<i>aitu</i>	ghost, spirit	Simona et al. 1986
Samoa	<i>aitu</i>	spirit, god, syn. <i>atua</i> ; apparition, phantom	Pratt 1878
		ghost, spirit	Milner 1966
		spirit of a dead person	Cain 1979
Tonga	<i>aitua</i>	(be) haunted	Milner 1966
	<i>'eitu</i>	a heathen feast	Rabone 1845; Tregear 1891
	<i>'Eitumatupu'a</i>	proper name of a certain supernatural being	Churchward 1959
	<i>'aitu</i>	see: <i>lau'aitu</i>	Churchward 1959
	<i>lau'aitu</i>	to cry, to weep, make lamentation	Rabone 1845; see also Colomb 1890
	<i>tangi-lau'aitu</i>	to cry and utter expressions of grief, to lament	Churchward 1959
Niue	<i>aitu</i>	ghost, supernatural being	McEwen 1970; see also Loeb 1926
Māori, New Zealand	<i>aitu</i>	deity, spirit; sickness, calamity	Tregear 1891
		sickness, calamity; demon	Williams 1971
	<i>aituā</i>	of ill omen, unlucky; unfortunate, in trouble; misfortune, trouble, disaster, distaste, accident; (evil) omen	Williams 1971; see also Tregear 1891, Biggs 1981
Rarotonga, S. Cook Islands	<i>aitu</i>	god, deity, spirit	Savage 1962
Pukapuka, N. Cook Islands	<i>aitu</i>	free-wandering spirit, ghost	Beaglehole & Beaglehole 1938
Manihiki, N. Cook Islands	<i>aitu</i>	god	Buck 1932
Ra'ivavae, Austral Islands	<i>aitu</i>	god, demon, supernatural being; ogre, ogress; the elemental powers of nature, personified	Stimson & Marshall n.d.
Tahiti	<i>aitu</i>	god, goddess, see <i>atua</i>	Davies 1851; Andrews & Andrews 1944
'Ana'a, Tuamotu	<i>aitu</i>	ghost, apparition of the dead person, supernatural being, spirit, demigod	Stimson & Marshall 1964
	<i>māitu</i>	name of a powerful god or spirit of the night world	Stimson & Marshall 1964
	<i>hoahoamāitu</i>	supernatural creature, "half" demon, "half" man	Stimson & Marshall 1964
Hao, Tuamotu	<i>aitu</i>	supernatural being, spirit, demigod	Stimson & Marshall 1964

Vahitahi, Tuamotu	<i>aitu</i>	supernatural being, spirit, demigod, god	Stimson & Marshall 1964
	<i>māitu</i>	deified ancestor, spirit of a dead person	Stimson & Marshall 1964
	<i>hoahoamāitu</i>	family spirit, deified ancestor	Stimson & Marshall 1964
Napuka, Tuamotu	<i>aitu</i>	god	Stimson & Marshall 1964
Fagatau, Tuamotu	<i>aitu</i>	god	Stimson & Marshall 1964
	<i>māitu</i>	guardian spirit or god	Stimson & Marshall 1964
	<i>hauaitu</i>	awe, dread; cold chills or a creepy feeling due to a supernatural presence; shuddering fear, dread...	Stimson & Marshall 1964

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16 *Cia-words in Tokelauan*

EVEN HOVDHAUGEN

1 Introduction¹

Tokelauan has undergone some significant lexical influence from Samoan (Hovdhaugen 1992). Although there is some evidence that this influence may have started before the missionaries brought Samoan pastors and the Samoan Bible to Tokelau (Hovdhaugen 1992:57), it is clear that the influence escalated strongly after Christianity was introduced. And it continues today although Samoan is used less and less in the church and although the pastors now are Tokelauans. Samoan radio and pop songs are as efficient as the church in maintaining and strengthening the position of Samoan in Tokelau.

A problem in analysing the Samoan elements in Tokelauan is that these two Polynesian languages are so similar that in many cases (i.e. when both languages have the same representations of Proto Polynesian phonemes), there is no way to detect whether a Tokelauan word is inherited from Proto Polynesian or borrowed from Samoan. Accordingly, it is likely that there are a number of hidden Samoan borrowings in Tokelauan (see also Hovdhaugen (1992:58-61)).

The Samoan influence on Tokelauan is lexical and there are no clear cases of any grammatical influence. A possible exception is the suffix *-Cia* in Tokelauan. *Cia*-forms are not frequent in Tokelauan discourse and they occur mainly in formal style, oratory and songs. Their limited number, their restricted use and the close correspondence many of them have with Samoan could indicate that they, or the majority of them, may be Samoan loan-words in Tokelauan. Furthermore, many Tokelauans consider these forms to be borrowings from Samoan. Let me add that I do not include under *Cia*-forms other ergative morphemes like the very productive *-a* suffix and the more marginal suffixes *-na* and *-ia* (*tēke-na* 'be

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refused', see Tok.² *teteke* 'refuse' and Sam. *tete'e/ te'ena* 'object, reject' and *ta-ia* 'be struck', see Tok. *tā* 'hit, strike' and Sam. *tā/taia* 'strike').

An investigation of these forms is interesting from several points of view. Borrowing of inflectional or derivational morphemes³ is not a common phenomenon and it is of some methodological interest to investigate borrowing of groups of words with a common morphological basis. Furthermore, a study of these *Cia*-forms in Tokelauan may throw new light on aspects of language contact in the Pacific as well as on the far from clear function of the *Cia*-forms in Tokelauan.

2 The form and function of the *Cia*-morpheme in Samoan and Tokelauan

Mosel and Hovdhaugen (1992:209-217) list 146 *Cia*-forms in Samoan. In the *Tokelau dictionary*, I have found 84 Tokelauan *Cia*-forms. Their distribution with regard to thematic consonants in the two languages is as follows:

Thematic consonant	Tokelauan	Samoan
Tok. and Sam. <i>f</i>	11	20
Tok. and Sam. <i>g</i>	17	28
Tok. <i>k</i> - Sam. <i>'</i>	4	5
Tok. and Sam. <i>l</i>	4	18
Tok. and Sam. <i>m</i>	8	11
Tok. <i>h</i> - Sam. <i>s</i>	15	27
Tok. and Sam. <i>t</i>	25	37
Total	84	146

What this tabular survey tells us is that the distribution between the two languages in frequency of forms with the same thematic consonant is practically identical except that *-ia* is comparatively rare in Samoan – probably due to the instability of the glottal stop in Samoan (Mosel & Hovdhaugen 1992:21). Whether this parallelism should be interpreted as an argument for or against borrowing is not clear since it should probably be expected in both cases. A lack of parallelism (e.g. most *Cia*-forms being restricted to one or a few thematic consonants in Tokelauan) would, on the other hand, certainly have demanded an explanation.

2 Abbreviations:

ART	article
id	identical meaning(s)
PASS	passive verb
PAST	past tense
Sam.	Samoan
SVO	Subject Verb Object
Tok.	Tokelauan

³ Note that there is hardly any clear difference between inflection and derivation in Tokelauan. This does not mean that all bound affixes in Tokelauan are of an equal status. There are suffixes like *-Cia* that are close to a prototypical derivational affix and others like the ergative suffix *-a* which are closer to a prototypical inflectional affix.

The main functions of the ergative suffix *-Cia* in Samoan are to form ergative verbs from non-ergative verbs and to form long forms of inherently ergative verbs (Mosel & Hovdhaugen 1992:198-199, 741-743). The *Cia*-suffix is not productive in Samoan and is sometimes replaced by the other two suffixes *-a* and *-ina* both of which are to some extent productive (Mosel & Hovdhaugen 1992:200-202). Furthermore, the *Cia*-suffix is used to form non-ergative verbs referring to natural phenomena or some kind of affection (see Mosel & Hovdhaugen 1992:202-203 and examples (1) and (12) below).

In Tokelauan, the function of the *Cia* -suffix is less clear. Tokelauan has a regular ergative suffix *-a*, *-gia* or *-agia* used with ergative verbs which have a pronominal agent or are negated. As we see, one variant of the *Cia*-suffix (*-gia*) has become productive in this function in Tokelauan. But for the other variants of the *Cia*-suffix (*-fia*, *-kia*, *-lia*, *-mia*, *-hia* and *-tia*) and also for *-gia* and *-a* (Hooper 1993:64) in other positions than those mentioned above, the function of the suffix is less clear. Hooper (1986:xxxvi) describes it as follows:

These forms are added to certain verbs with related meanings...This is a non-productive suffix; it is only attached to certain words and these are listed in the dictionary...An interesting fact about verbs with this suffix is that, although many of them can be used with agent phrases, they cannot be used in the imperative, unlike other verbs which have agent phrases.

The impossibility of using *Cia*-forms in imperatives also applies to Samoan although this is not stated clearly in Mosel and Hovdhaugen (1992). It seems clear that the *Cia*-suffix in Tokelauan, in contrast to in Samoan, has no clear grammatical function and is a typical non-productive derivational morpheme. However, this again can be taken as an argument for either borrowing or a status as archaic relics in Tokelauan.

3 A classification of *Cia*-forms in Tokelauan

3.1 Forms that may be inherited or borrowed

This is the main group (48 forms), but also the least interesting one, simply because we cannot say anything more about them than that the words may be inherited as well as borrowed. Here are a few examples:

- (1) *afātia* 'be struck by a storm', see *afā* 'hurricane' and Sam. *afā*, *afātia* id.
- (2) *alofagia* 'be well-treated, shown love', see *alofa* 'love' and Sam. *alofa(gia)* id.
- (3) *inumia* 'drinkable, fit for drinking', see *inu* 'drink' and Sam. *inu(mia)* id.
- (4) *ulufia* 'be entered, possessed', see *ulu* 'enter, be ahead' and Sam. *ulufia* and *ulu* id.
- (5) *motuhia* 'be broken, non-existent', see *motu* 'be broken' and Sam. *motu(sia)* id.

3.2 Isolated forms

There exist in Tokelauan 8–10 words ending in *-Cia* which have no cognates in Samoan or Tokelauan and for which corresponding forms in other Polynesian languages are also non-existent (6) or doubtful (7)–(8). In some cases, the morphological parsing may be wrong and no *Cia*-derivation has ever existed. The following are examples of these isolated forms:

- (6) *ilikia* 'continue one's family line by having at least one child'. No cognates.
- (7) *fōnuhia* 'be in a state where one is overfed or has overeaten'. No Tok. or Sam. cognates, but see Tongan *fonu* 'full' and *fōnuhia* 'to have water in the lungs'.

- (8) *likofia* 'be mixed with blood'. No Tok. or Sam. cognates, but see Tongan *likoliko* 'dirty' and Maori *riko* 'sweat'.

3.3 Borrowings from Samoan

Let us now see if we have examples of clear borrowings of *Cia*-forms from Samoan. The result is meagre and not all cases are equally convincing, as illustrated below.

- (9) *alumia* 'be in great demand'. No cognates in Tokelauan. Sam. *alumia* id. and *alu* 'go', see Tok. *fano* 'go'. The etymological connection between *alu* and *alumia* in Samoan is, however, not certain; see Sikaiana *ālu* 'attempt' and *alumia* 'be courted by someone'.
- (10) *amuhia* 'be laughed at, made fun of', see Sam. *'amusia* id. and *'a'amu* 'mock'. The correspondence Tok. 0 = Sam. ' is usually a certain indication of borrowing.
- (11) *haofia* 'be accessible, possible', see Sam. *saofia* and *sao* 'gain access to, go through'. There is no root form attested in Tokelauan.

3.4 Inherited *Cia*-forms

There are numerous *Cia*-forms in Tokelauan which are difficult to explain as borrowings. First we have many forms with the correspondence Tok. *k* = Sam. '. This is, however, not always an absolutely certain indication that the suffix and the corresponding forms have been borrowed. Tokelauans are well aware of this sound correspondence and sometimes restore or Tokelauanise such forms by replacing Samoan ' by *k*. But it seems quite unlikely in all the examples given below since there are so many.

- (12) *alikitia* 'be occupied by chiefs', see *aliki* 'chief' and Sam. *ali'i(tia)*.
- (13) *eketia* 'be abounding with fish'. There is no corresponding root **eke* in Tokelauan. See Sam. *e'e(tia)* 'raised, propped up'.
- (14) *kalofia* 'be avoided', see *kalo* 'dodge, evade, steal' and Sam. *'alofia* and *'alo* id.
- (15) *kavahia* 'be stung, affected by pungency, heat', see *kakava* 'be acrid, pungent' and Sam. *'avasias* and *'a'ava* id.
- (16) *kupugia* 'be talked about unfavourably', see *kupu* 'word' and Sam. *'upuia* and *'upu* id.
- (17) *matakutia* 'be horrible, frightening', see *mataku* 'be afraid' and Sam. *mata'u(tia)* id.
- (18) *lakahia* 'be stepped over', see *laka* 'step' and Sam. *la'a(sia)* id.
- (19) *okotia* 'have sufficient breath to go to a certain depth', see *oko* 'arrive, happen' and Sam. *o'o* id. and *o'otia* '(of feelings) be moved, touched, struck'.
- (20) *pikitia* 'be carrying a crop of coconuts', see *piki* 'hold fast' and Sam. *pi'itia/pipi'i* 'cling to'.
- (21) *hikitia* 'be promoted, imposed', see *hiki* 'lift, raise' and Sam. *si'i(tia)* id.
- (22) *hopokia* 'be swamped over the sides', see *hopo* 'board, overstep' and Sam. *sopo* and *sopo'ia* 'go over'.
- (23) *valakaulia* 'be invited', see *valakau* 'invite' and Sam. *vala'au(lia)* 'call, invite'.

Secondly there are some cases in which Tokelauan has *Cia*-forms without correspondences in Samoan or where the two languages differ in the thematic consonant. Words without corresponding *Cia*-forms in Samoan:

- (24) *atafia* 'realise', see *ata* 'be seen, visible, image, picture' and Sam. *ata* id., but without any corresponding *Cia*-form.
- (25) *fāitio* 'be criticised', see *fāitio* 'criticise' and Sam. *fāitio*, but without any corresponding *Cia*-form.
- (26) *fakatakotolia* 'be ill in bed, hospitalised', see *fakatakoto* 'lay down' and *takoto* 'lie' (but no **takotolia*) and Sam. *ta'oto* id., but without any corresponding *Cia*-form. See also Maori *whakatakotoria*.
- (27) *mālūtia* 'be calmed, caught in a doldrum', see *mālū* 'calm, cooling' and Sam. *mālū* id., but without any corresponding *Cia*-form.
- (28) *miohia* 'be twisted', see *mimio* 'twist' and Sam. *mio* 'mix, associate', but without any corresponding *Cia*-form.
- (29) *hogotia* 'have a smell of urine', see *hohogo* 'smell of urine' and Sam. *sogo* 'smell of urine', but without any corresponding *Cia*-form.

Words with different thematic consonants in Samoan and Tokelauan:

- (30) *auhia* 'be reached, arrived at', see *au(lia)* 'reach' and Sam. *au(lia)* 'reach, flow on'.
- (31) *fitikia* 'be struck by something which flicks or bounces around', see *fiti* 'bounce, flick' and Sam. *fiti* and *fitiā* id. Etymologically, the expected thematic consonant here is *-k-*, see Tikopia *fitikia* 'rise, spring to mind'.
- (32) *lūtia* 'be shaken', see *lūlū* 'shake' and Sam. *lūlū* and *lūlūina* id.

An interesting point, and one supporting the analysis of the *Cia*-suffix in Tokelauan as degrammaticalised and derivational, is the semantic specialisation of some of the *Cia*-forms. They frequently narrow their meaning compared with the root or acquire a specialised meaning, as in examples (13), (19), (22) and (33).

- (33) *tūlia* 'be perched on by birds', see *tū* 'stand' and Sam. *tū* 'stand' and *tūlia* 'stand on, occupy'.

4 The *Cia*-suffix in Sikaiana

According to both Tokelauan and Sikaianan tradition, Sikaiana was settled a few hundred years ago by people from Tokelau, mainly from Atafu. Accordingly, a comparison between the function of the *Cia*-suffix in the two languages may be illuminating.

Sikaiana is an SVO language. The *Cia*-suffix is frequent in Sikaiana and its main function is to form passive verbs⁴ and to express transitive commands,⁵ see (34)–(37):

⁴ Passive verbs can also be formed with the suffixes *-ia* and *-a*.

⁵ The use of the passive in imperative sentences in Sikaiana is in absolute contrast to the impossibility of using *Cia*-forms in imperatives in Samoan and Tokelauan.

- (34) *Ttama ni aka te kuli.*
ART.boy PAST kick ART dog
'The boy kicked the dog.'
- (35) *Te kuli ni aka-sia e ttama.*
ART dog PAST kick-PASS by ART.boy
'The dog was kicked by the boy.'
- (36) *Aka-sia!*
kick-PASS
'Kick him/her/it!'
- (37) *Aka!*
kick
'Kick!'

There are numerous *Cia*-forms in Sikaiana – probably many more than in Tokelauan⁶ – and they have a clear grammatical function. In Tokelauan, the *Cia*-suffix has no clear grammatical function any longer and is just a non-productive derivational suffix. The Sikaiana connection may indicate that earlier there were more *Cia*-forms in Tokelauan, and that their number was reduced when they lost their grammatical function. But what this function was is harder to say. In any case, the case of Sikaiana and Tokelau shows us that a lot can happen to the morphology and syntax of Polynesian languages in the span of a few hundred years.

5 Conclusion

I think we can without any reasonable doubt state that many *Cia*-forms in Tokelauan are inherited from Proto Polynesian and that very few are clear borrowings from Samoan. This means that we are probably justified in assuming that most of the forms that could be either borrowed or inherited are most likely inherited.

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⁶ See the short word list of Donner (1987) and my own observations from a few days' work with Sikaiana informants.

17 *Ergative case avoidance in East Futunan (EFu)*

CLAIRE MOYSE-FAURIE

1 Introduction

Some of the structures that avoid ergative marking have been thoroughly described recently for Samoan by Duranti and Ochs (1990) and Duranti (1994:130-132) in relation to communication strategies and social structure. They mention two structures that avoid using an ergative nominal argument: one by pure omission and the other where an agent is marked as a possessor. Both constructions appear in Futunan, with the same effect of backgrounding the agent. I will describe them briefly before mentioning yet another type of structure which also avoids ergative marking, but which, on the contrary, highlights the agent's intention and will.

First, I will give a few general rules of Futunan argument structure.

2 Expression of nominal phrase arguments in a simple verb phrase

This is set in a dual, contrastive perspective of a transitive construction, defined as a two-argument syntactic structure – one in the absolutive, the other in the ergative – and an intransitive construction with a sole absolutive argument.

The indirect transitive construction, which is specific to middle verbs, and which is a two-argument structure – one in the absolutive (the experiencer), the other in the oblique case (the goal, patient, beneficiary) – is not relevant here, since in Futunan the experiencer cannot be marked as an agent, as its case marking shows in the nominalised verbal clauses quoted further on (see §2.4.3).

We will put aside the indirect transitive construction, to concentrate on the intransitive construction and the transitive (or ergative) construction.

In Western Polynesian languages, a transitive verb is not obligatorily associated with a two-argument structure. In Samoan, only the absolutive argument is necessary (Mosel & Hovdhaugen 1992:426, 700) and when the verb is transitive, this argument refers to a patient. The ergative argument denoting the agent is an expansion.

A similar situation obtains in Futunan, but with two restrictions. On the one hand, some verbs may admit a unique ergative argument, and on the other hand, some unoriented transitive verbs may have a sole absolutive argument referring to an agent.

2.1 A sole absolutive argument

A sole argument is, in most cases, in the absolutive and refers to:

- the sole argument of an intransitive verb expressing an agent:

- (1) *E ifo le toe mei le ma'uga.*
 NS go down DEF child from DEF mountain
 'The child goes down from the mountain.'¹

- or a patient:

- (2) *E masaki loku tuaga'ane.*
 NS sick my brother
 'My brother is sick.'

- or the argument corresponding to the patient of a transitive verb (in which case, the ergative argument is merely omitted (see §2.3)):

- (3) *E valu le niu.*
 NS grate DEF coconut
 'The coconut is grated.'

- or the syntactically complex argument (genitive construction), with a head noun referring to the patient, and a modifier referring to a participant readily interpretable as the agent of the process expressed by the transitive verb (see §2.4).

¹ Abbreviations:

ABS	absolutive
ANAPH	anaphoric
CLASS	noun classifier
COMP	complementiser
DEF	singular definite article
DEICT	deictic
DIR	directional
DU	dual
EM	end phrase marker
ERG	ergative case marker
INCL	inclusive
lit.	literally
NEG	negative marker

NP	noun phrase
NS	non-specific aspect
OBL	oblique case marker
PAST	past tense
PERF	perfective aspect
PL	plural
POSS	possessive
PRED	predicate marker
SG	singular
SUCC	successive aspect
TAM	tense-aspect-mode
Vb	verb
1, 2, 3	person

1.2 A sole ergative argument

In Futunan, a few transitive verbs optionally and frequently have a sole ergative argument.

These few verbs admit either a sole ergative argument or a sole absolutive argument. This is the case with verbs such as *mafai* 'be able to', *fakataga* 'allow', *tali* 'accept, be willing to', *iloa* 'know'. It is interesting to note that these verbs denote either a real power or a mere potential action.

Although a great majority of transitive Futunan verbs are 'goal oriented' (Biggs 1974:410), these verbs seem rather to be 'agent oriented'.

- (4) *E mafai e Petelo.*
NS possible ERG Petelo
'Petelo is able to do it /can do it.'
- (5) *Kua iloa papau e le temonio.*
PERF know certainly ERG DEF demon
'The devil is sure of it.'
- (6) *E fakataga e le kau aliki.*
NS allow ERG DEF CLASS chief
'The chiefs give authorisation.'

In such sentences, the absolutive argument is omitted.

Conversely, it should be noted that these verbs, like any Futunan verb, may have only one argument in the absolutive, with the agent being omitted.

- (7) *E fakataga le kakai ke ano o faifeua.*
NS allow DEF people so.that go COMP fish
'People are allowed to go fishing.'

Now, let's go back to the most common case where a transitive verb has only one argument in the absolutive.² In this restricted syntactic frame, two strategies allow the agent to be set aside: it may either be merely omitted, or it may be expressed as a possessor, the modifier of the head noun referring to the patient.

2.3 Omitted agent of a transitive verb

The omission of the ergative argument is one of the possible strategies. In Futunan as in Samoan, such deletion is structurally possible, as any verb may do without an ergative argument.

² We are not taking into consideration here the noun incorporation process, where the absolutive argument of a transitive verb is incorporated in the verb phrase; the detransitivised verb forms with the patient a verbal compound and the former ergative argument is changed into an absolutive argument:

e gau le tolo e le toe 'The child is chewing the sugarcane'

NS chewDEF sugarcane ERG DEF child

e gau tolo le toe

'The child is chewing sugarcane'

But it should be realised that when a Futunan transitive verb has a sole argument in the absolutive, it does not refer automatically to a patient. As some verbs are non-oriented, this argument may refer either to an agent or a patient, in one-argument structures. With ergative verbs such as *autalu* 'weed', *kai'ā* 'steal' or *kai* 'eat' the absolutive argument may refer either to an agent or to a patient. For example: *e kai'ā le toe* means either 'the child is a thief' or 'a child has been stolen'.

With such transitive verbs, one must be careful not to assimilate an unexpressed ergative argument with an unexpressed agent.

Thus, in one of the two possible interpretations of such a sentence, the argument, though in the absolutive, is the agent of a transitive verb.

To sum up, Futunan has three main strategies in order to omit one argument of a transitive verb:

- patient omission with verbs such as *mafa'i* 'be able to'
- agent omission with 'goal/patient oriented' verbs such as *valu* 'grate, be grated'
- omission of one of the arguments (patient or agent) with non-oriented verbs such as *kai'ā* 'steal, be stolen'.

2.4 Genitive constructions

As in Samoan, genitive constructions are used in Futunan for other semantic roles than possession. In verbal sentences, with transitive or intransitive verbs, they can express a certain degree of agentivity.

Marking the agent as the possessor in a genitive noun phrase is another way of avoiding ergative marking in Futunan.

The genitive constructions expressing a participant never appear with a middle verb, except in nominalised verb phrases (see §2.4.3); they are quite frequently used to express the agent, or an agent-like participant, with intransitive or transitive verbs.

2.4.1 Intransitive verb

The concept of agent is included in the expression of the possessor (the possessive adjective *lana*, as in example (8) below) but it expresses a low degree of agentivity, an involuntary process.

- (8) *Kua puli lana sele.*
 PERF absent his knife
 'He lost his knife.' (accidentally)

In (8), the loss of the knife is attributed to its possessor. If this were not the case, a causal adjunct (for example *ia Paulo* 'because of Paulo') referring to the causer of the loss, would be added.

The verb *puli* must have causative derivation to admit an ergative argument denoting conscious, real agentivity, but this argument is never obligatory :

- (9) *Kua fakapuli (e ia) lana sele talie e le'ese fia ga'oi.*
 PERF lose (ERG 3SG) his knife because NS NEG feel.like work
 'He (intentionally) lost his knife because he doesn't feel like working.'

The possessive construction is also very common with intransitive verbs denoting an aspectual or a stative meaning, followed by a nominalised verbal clause. See examples (10) to (12) below.

- (10) *Ka 'oki loa lau fufulu ne'a ti ke ano loa o fagota.*
 when finish SUCC your wash thing then 2SG go SUCC COMP fish
 'When you finish washing the dishes you will go fishing.'
- (11) *E usoga le kai a le fāmili kae tā le lali.*
 NS last DEF eat POSS DEF family but beat DEF drum
 'The family is eating as the drum is beaten.'
- (12) *E 'iki'iki le taisigā fafie a Petelo.*
 NS small DEF cutting firewood POSS Petelo
 'Petelo chops lots of firewood into small pieces.'

2.4.2 Transitive verb

The example in (13)a is a possessive construction, and (13)b is the corresponding ergative construction.

- (13)a. *E feave'aki a fakapaku a Atelea i lamatu'a.*
 NS peddle ABS doughnut POSS Atelea on road
 'Atelea peddles his doughnuts along the road.'
- b. *E feave'aki e Atelea ana fakapaku i lamatu'a.*
 NS peddle ERG Atelea his doughnut on road
 'Atelea peddles his doughnuts along the road.'

It must be noted that the possessive construction as in (13)a has two possible interpretations: the doughnuts (*fakapaku*) may be sold by Atelea, or they may be Atelea's doughnuts sold by someone else not mentioned in the sentence. But this latter interpretation is not primary.

In the next example, it is possible to add the ergative argument *e ia* just after the verb phrase to emphasise the agent, but this is not usually required.

- (14) *Na ta'o lana puaka lasi ke ma'iloga ai*
 PAST cook his pig big so.that show ANAPH
lona tagata i le fakatasi.
 his manhood OBL DEF feast
 'He baked a big pig for the feast to show what a fine man he is.'

2.4.3 Possessive constructions in nominalised verb phrases

In nominalised verb phrases, the participants are introduced either by a possessive marker (preposition *a* or *o*), or by verb argument markers (the ergative *e* or oblique *i* and *ki*). Here again, participant marking depends on the verb class.

Middle verb:

In nominal sentences with a nominalised middle verb, the experiencer is expressed as the modifier (introduced by *o*) in a genitive construction.

- (15) *Ko lenä tio atu o lona tinana, ti tagi atu a ia...*
 PRED DEICT see DIR POSS his mother then cry DIR ABS 3SG
 'His mother sees him, and she cries...' (lit. 'here is his mother's vision towards him, and she cries...')

The possessive preposition *o* required after the nominalised verb *tio* is the inalienable, non-agentive, object-like possession marker. In Futunan, an experiencer is not marked as an intentional agent.

Intransitive 'agent-oriented' verb:

The agent is marked by the alienable possessive marker *a*; the relation between the nominalised verb constituting the head noun and its modifier is agentive-like, but the agent's intentionality is low. His action is more accidental than intentional:

- (16) *I le fāfā a le toe ki le matapā na kelekele.*
 OBL DEF touch POSS DEF child OBL DEF door PAST dirty
 'Because of the boy's touching of the door, it was dirty.'

Transitive verb:

If the two arguments are present, the agent remains in the ergative case, the patient is the modifier of the nominalised verb functioning as a noun head and is introduced by the possessive marker *o*.

In (17), the ergative construction, related to the transitive verb *fāfā'i*, expresses greater intentionality on the part of the child: he has done it on purpose.

- (17) *I le fāfā'i o le matapā e le toe na kelekele.*
 OBL DEF touch POSS DEF door ERG DEF child PAST dirty
 'The door was dirty because the child touched it.'

Transitive verb with only one argument present:

If this argument is the patient, it will be expressed as the modifier (introduced by *o*) of the nominalised verb as head noun; if it refers to an agent, it will be introduced either by the ergative marker *e* (example (18)), or by the possessive marker *a* as in (19), according to the degree of intentionality imputed to the agent:

- (18) *I le fāfā'i e le toe na kelekele ai le matapā.*
 OBL DEF touch ERG DEF child PAST dirty ANAPH DEF door
 'The door was dirty because the child touched it.'
- (19) *Lolotoga le ta'o a Selelino, na moe lona kautagata.*
 during DEF cook POSS Selelino PAST sleep his friend
 'While Selelino was busy watching the cooking, his pal was sleeping.'

3 Expression of nominal phrase arguments in an auxiliary construction

Besides the omission of the agent or the use of a genitive construction, another structure is used in Futunan to avoid using an ergative argument.

This is fairly different from what has been described up to now. First, this structure is relevant to aspectual and modal strategy, and second, the agent is not backgrounded, or expressed as less responsible; on the contrary, full agency is stressed.

In such constructions, there are two verbs related by a complementiser, and each verb may have an absolutive argument. The first tends to be grammaticised into an auxiliary verb:

Auxiliary construction:

- (20) TAM + Auxiliary Vb + ABS.NP (agent) + COMP *o* + Vb + ABS.NP (patient)

3.1 Auxiliary verbs

Three main verbs are frequently used as auxiliaries in such constructions: '*au* 'come' and *mafuli* 'turn round', which admit either ergative or non-ergative verbs after the complementiser, and '*aga* 'face', which requires ergative verbs only, whether they are followed by an argument or not. Occasionally, some other verbs of movement (*ano* 'go', *natu* 'come', *ifo* 'go down', and so on) may have the same function.

As auxiliaries, they all have the same aspectual or modal value, 'start doing something', meaning that the process is either imminent, beginning, or has at least been decided.

All the following examples come from oral tradition texts.³

The example in (21) shows the auxiliary function of '*au* 'come':

- (21) *'Au a Safoka o to'o le fui tuna la.*
come ABS Safoka COMP take DEF bunch eel EM
'Safoka took the bunch of eels.'

The example in (22) has *mafuli* 'turn':

- (22) *Mafuli ake lätou o pü le tasi a 'umu*
turn DIR 3PL COMP light DEF one POSS oven
o toe ta'o ai a Lolomai.
COMP again cook ANAPH ABS Lolomai
'They prepared another oven to bake Lolomai.'

But the most frequent auxiliary construction is with '*aga* 'face':

- (23) *E pati na 'aga le aloa ko Gututagi la o lü*
NS say PAST face DEF man PRED Gututagi EM comp shake
le niu la ti vilo ake le tagata la o mate.
DEF coconut-tree EM then fall DIR DEF man EM COMP die
'It is said that Gututagi shook the coconut-tree, and the man fell down and died.'
- (24) *Ti 'aga a Kai'ola'ola o tuki'i a Soko ki fale.*
then face ABS Kai'ola'ola COMP throw (stone) ABS Soko towards house
'Kai'ola'ola threw a stone at Soko in the house.'

3.2 Semantic implications of the auxiliary construction

The auxiliary construction is also frequent in nominalised verb sentences, as shown in examples (25) and (26):

³ Frimigacci et al. (1995).

- (25) *E iai le fakamä'oki o lana 'aga o tamate a Petelo.*
 NS exist DEF truth POSS his face COMP kill ABS Petelo
 'There is evidence that he killed Petelo.'
- (26) *O 'oki lenä lalä 'aga o fai olä 'ulu la...*
 COMP finish DEICT their face COMP do their hair EM
 'After taking care of their hair...'

This auxiliary construction is possible with all tense-aspect markers, including *ka* which marks an imminent event.

This is not so much a question of locating an event on a tense-aspect axis, as a way of stressing the agent's intentionality or determination in carrying out the process, which may in certain cases connote obligation, as in (27):

- (27) *Ti ko le fua leia a Tavai na 'aga o tuli*
 then PRED DEF fleet DEICT POSS Tavai PAST face COMP chase
le vaka o le fakatautamana.
 DEF boat POSS DEF father.and.sons
 'The fleet of Tavai decided to chase the boat of the father and his sons.'

Consequently, when negative as in (28) and (29), this structure denotes that the agent is evading taking a decision:

- (28) *'Tuapese, nofo la i lou fenua nä e se ke*
 Tuapese stay EM in your village because NS NEG 2SG
'aga o iloa laku 'au o käfiga mai!
 face COMP know my coming COMP ask.for.marriage DIR
 'Tuapese, stay in your village, as you didn't want to listen to my marriage proposal!'
- (29) *Na to'o loa e ia a tagata o ifo mai mo ia.*
 PAST take SUCC ERG 3SG ABS man COMP go.down DIR with 3SG
E se 'aga a ia o kai kae tuku e ia talie
 NS NEG face ABS 3SG COMP eat but let ERG 3SG because
e 'aoga kiate ia.
 NS useful OBL 3SG
 'He captured the men and took them with him. He decided not to eat them, he saved their lives, because they might be useful to him.'

The construction with *'aga* may be considered more respectful. This is particularly the case at the very beginning of stories, as in example (30):

- (30) *E kau fia 'aga mu'a o fakamatala atu*
 NS 1SG feel.like face first COMP tell DIR
le ano'aga o le velosaga lenä...
 DEF reason POSS DEF battle DEICT
 'I would like first to tell you why the battle took place...'

3.3 Contrastive use of the auxiliary construction and the ergative construction

The construction with *'aga* is sometimes glossed by fluent French-speaking Futunans as being the active counterpart of the ergative construction. Yet they are complementary constructions. They do not mark an active/passive contrast, rather, they seem to oppose a potential but decided event, to an achieved one: with *'aga* the process is decided, but with the ergative structure it is actually achieved and effective.

Here are a few examples of these alternating constructions, which give a very specific rhythm to story telling. All absolutive or ergative agents as well as the auxiliary verbs are underlined:

- (31) 1. *Ti* *mafuli* *loa* *leia* *le* *aloe* *lenä* *ko* *Ma'uifa* *la* *o*
 then turn SUCC DEICT DEF man DEICT PRED Ma'uifa EM COMP
velo lona lima atamai la i lona fëtu'u atamai la'.
 plunge his hand right EM in his side right EM
 'Then Ma'uifa plunged his right hand into his right side.'
2. *Velo* *e* *ia* *lona lima la o pü o kaku lona*
 plunge ERG 3SG his hand EM COMP hole and reach his
lima la ki lona ate la.
 hand EM OBL his liver EM
 'He plunged his hand, made a hole and reached for his liver.'
3. *Ti* *'aga* *loa* *a* *ia* *o sa'u lona ate la*
 then face SUCC ABS 3SG COMP take.out his liver EM
o 'aga a ia o vaelua.
 and face ABS 3SG COMP divide.in.two
 'He took his liver out and shared it into two parts.'
4. *O soli mai loa e ia leia le maga 'i ate leia*
 and give DIR SUCC ERG 3SG DEICT DEF lobe of liver DEICT
e tasi la o soli e ia ki Pomai, kae nofo loa a
 NS one EM and give ERG 3SG OBL Pomai but stay SUCC ABS
ia mo le maga 'i ate maga lua la.
 3SG with DEF lobe of liver lobe two EM
 'He gave the smaller part of the liver to Pomai, and kept the bigger part with two lobes.'
5. *Ti* *'aga* *loa* *a* *Pomai* *aia o to'o lenä le maga 'i ate*
 then face SUCC ABS Pomai DEICT COMP take DEICT DEF lobe of liver
na soli mai la o velo ki lona fëtu'u atamai la kae
 PAST give DIR EM and plunge DIR his side right EM but
sa'u e ia le fä masi na nofo i ai la.
 take.out ERG 3SG DEF CLASS breadfruit PAST stay OBL ANAPH EM
 'Pomai took the liver part that was given to him, inserted it under his right side and took out the fermented breadfruit he had put there.'

6. *O kai e ia le fä masi la ti kai e*
 and eat ERG 3SG DEF CLASS breadfruit EM then eat ERG
le aliki la aia a le maga 'i ate la.
 DEF chief EM DEICT ABS DEF lobe of liver EM
 'He (Pomai) ate this fermented breadfruit while the chief (Ma'uifa) ate
 his own part of the liver.'

In the last sentence, it is the *a*-possessive construction which is used, as is often the case with aspectual verbs:

- (32) *O 'oki le maga 'i ate a le aliki la ti 'oki*
 and finish DEF lobe of liver POSS DEF chief EM then finish
le fä masi a Pomai la.
 DEF CLASS breadfruit POSS Pomai EM
 'The chief ate up the liver, (lit. 'The lobe of liver of the chief was finished.)
 and Pomai ate up the fermented breadfruit.' (lit. then the breadfruit of Pomai
 was finished')

Example (33) highlights the fact that the use of the ergative structure is less an assignment of responsibility than an assignment of effectiveness:

- (33) *Ti toe makape mai mo le fafine Alo kua folo*
 then again run DIR also DEF woman Alo PERF swallow
e leia fafine le fä pule ti 'aga
 ERG DEICT woman DEF CLASS cowrie.shell then face
a ia o sae le gutu o le fafine kae
 ABS 3SG COMP tear DEF mouth POSS DEF woman but
kua folo 'oki le fä pule e le fafine.
 PERF swallow finish DEF CLASS cowrie.shell ERG DEF woman
 'Then a woman from Alo came running up, [having seen] the other woman
 swallowing the cowrie shell; she rushed to open her mouth, but the woman had
 already swallowed it.'

In example (34), there seems to be an aspectual contrast between the two auxiliary constructions which are durative and the ergative one, which is punctual:

- (34) *Ti 'aga loa le tama la aia o laga le tänuma*
 then face SUCC DEF young.man EM DEICT COMP lift DEF tomb
la o to'o fuli e ia le siapo leia na nofo ai le
 EM and take totally ERG 3SG DEF tapa DEICT PAST stay ANAPH DEF
fafine la o 'aga a ia o kofu.
 woman EM and face ABS 3SG COMP wrap
 'The young man lifted the tomb, took hold of the tapa on which the woman lay,
 and wrapped her in it.'

However, those contrasting structures may sometimes emphasise different levels of responsibility, as in example (35):

- (35) *Io, ko koe la, le'ese ko lomä fänau; na mā*
 yes PRED 2SG EM NEG PRED our child PAST 1DU.INCL
'aga fa'i o 'aumai a koe o tausi.
 face only COMP bring ABS 2SG COMP bring.up
Na 'aumai a koe e le finematu'a la.
 PAST bring ABS 2SG ERG DEF old.woman EM
 'It's true, you are not our son; we have only brought you up. It's the old woman
 who has brought you here.'

This story is about a half-god character called Muni that a woman, on her way down to the sea, once discovered still wrapped in his placenta. She took him to her husband, and the childless couple were happy to bring him up. Yet, as Muni was growing up, his power became so great that it frightened his companions. His parents grew worried. Once, as they were discussing the trouble he was causing, Muni overheard their conversation, thus learning that he was an adopted child.

In example (35) the use of the ergative construction puts stress on the husband's reproaches to his wife who had brought the child home.

4 Conclusion

This auxiliary construction is characteristic of Futunan story telling, though it appears in other speech types. It is still another strategy to avoid ergative marking, with mostly modal values, assigning decision or initiation of the process, when ergative assigns effectiveness.

The role of the agent may thus be expressed morphosyntactically in various ways. Each strategy voices a different perception of agentivity, which may be voluntary, contextual or accidental:

- the agent expressed as a possessor rests on the conceptual link between an object and a process that the possessor is very likely to have conducted on it. This natural link underlines a potential but low and involuntary agentivity.
- the agent as an absolutive argument may be the sole argument of an 'agent oriented' intransitive verb: the agentivity is total; it may also be the only expressed argument of a transitive and non-oriented verb: its interpretation as an agent depends on the context; finally, it may be the argument of an auxiliary verb, and is then always interpreted as an intentional agent.
- the agent as an ergative argument, be it the second argument of a transitive verb or its prime argument with verbs such as *mafai*, *fakataga* and so on, expresses above all the effectiveness, the achievement of the process.

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18 Gahua he tohi vagahau Niue: *Niue dictionary project: orthography and vowel quality*

WOLFGANG B. SPERLICH

Fakaalofa lahi atu! Welcome! – spelling variation (or misspelling?): *fakalofa lahi atu!*

1 Niue dictionary project¹

This project is funded by the Niue Government (Department of Education) and UNDP. It provides for technical equipment (computer hardware and software, printers, photocopier, etc.), office space, a seven-member Dictionary Panel, a secretary, an international consultant (Professor Bruce Biggs) and a resident lexicographer (W. Sperlich). Project duration is March 1993 to March 1996, with a possible extension to September 1996. Primary output objectives are an archival database, a bilingual and a monolingual dictionary. The archival database and the bilingual dictionary are now close to completion. The dictionaries are to be published by University of Hawaii Press. The project has to provide camera-ready copy.

Orthography, generally, and how to deal with different vowel qualities (short, long and possibly slightly or fully rearticulated) in particular, have been important issues for the dictionary makers. Literacy (English and Niuean) in Niue is one of the highest in the USP region, and Niueans passionately care about their language (Lui in prep.; Sperlich 1994). Niuean language matters are therefore of wide public concern. This article recounts the steps

¹ I am grateful for help received from Atapana Siakimotu, Pita Tanaki, Fellow Pahetogia, Iris Lui, Hula Funaki and Sifa Ioane. At the conference I received many interesting comments which have been incorporated in this revision. Professor Biggs made a number of important written comments, most of which are also incorporated here. Naturally I alone am responsible for any errors and omissions that remain.

that led to the eventual orthographic standards adopted for the Niue Dictionary Project. As such the narrative emphasises the question as to how certain decisions were made, rather than detailing the decisions first. The path taken was neither straight nor narrow, but not in flagrant violation of linguistic and scientific principles. The problem with linguists is sometimes that they fix their scientific 'gaze' (to borrow Foucault's (1973) famous word) on language as if it were a capacity that happens to reside inside human beings, rather than focusing on human beings who have a language capacity. Lexicography as a team effort, in my experience at least, largely deals with the latter.

2 A brief history of Niuean orthography

Orthography, like no other branch of linguistics (if it is one) excites the popular imagination. Correct spelling is an obsession to some, a nuisance to others:

All future attempts to simplify the spelling of English words will, with all certainty, meet the same fate as those unsuccessful efforts made in the past. The genius of the English language does not lend itself to such manipulative devices. (Horan 1994:5)

...perhaps they find standardisation helpful for linguistic description and dictionary making, or perhaps they believe that it makes it easier for beginners to learn how to read ... with regard to dictionary making, ignoring variants in favour of a single 'standard' spelling is certainly convenient for the lexicographer, but it certainly does not contribute to the completeness of the description. (Black 1990:84)

...designing an orthography in the beginning stages at least is really the job of a specialist linguist. But the linguist can only go so far in designing an orthography, because at the same time, the way that people are going to spell their language is going to depend on the way they are happy to see it written. (Crowley 1986:443)

Whether one agrees with one or the other, the historical evolution of any writing system must impact on any current issues.

The reduction of spoken Niuean to a written form is, as elsewhere in Polynesia, closely tied to missionary history. Ryan's (1994) thesis gives an illuminating account of this general process for Niue. Suffice to say here that missionisation from 1830 onwards, under the guiding hand of John Williams' Samoan station, proceeded in an orderly way, culminating in the long term consecutive residencies of the Lawes brothers from 1861 to 1910. Various religious tracts were translated into Niuean from 1830 to 1861 by Samoan teachers who would use the Samoan Bible to translate into Niuean and then send the drafts to Samoa to be edited and revised by G. Pratt (Niueans sent to Samoa to be trained as missionary teachers assisted Pratt). This resulted in one of the earliest known linguistic texts for Niuean, Pratt's (1861) *Niue vocabulary*. The remaining scriptures were translated under the linguistic influence of the Lawes brothers (the first complete Bible was published in 1884). The first grammar was Tregear and Smith (1907) in *Vocabulary and grammar of the Niue dialect of the Polynesian language*, based on the work of Rev. W.G. Lawes (resident in Niue 1861 to 1872). Of immediate orthographic interest is their title page which gives Niue as NIUE (with 'accent' as diacritic) and in its subtitle as NIUE (with 'macron' as diacritic).

2.1 Tregear and Smith (1907)

The 'letters' of the Niuean alphabet in this work (1907:1) are explained rather inconsistently: while long *ā* (with macron) is commented upon (as opposed to short *ā*- written

with a half-moon diacritic), long \bar{e} is mentioned with less certainty, and the possibility of other long vowels is not mentioned at all, while in the vocabulary section long \bar{o} and \bar{u} are used (but not long \bar{i}). In the vocabulary section the diacritic for short vowels is also sometimes used when emphasising contrast, as in:

Ku 'short'
Kūkū 'short'
Kūkū 'to hold fast'

While this example also begs the question why *ku* should have a short vowel when its reduplicated form has long vowels, the additional convention of emphasising 'short' vowels with the '˘' diacritic (when normally short vowels are unmarked) must be confusing.

It should be noted that the same confusing spelling conventions and diacritics appear in the Niuean Bible from this date. The Bible has many spelling mistakes, probably due to technical interference (intentional and unintentional) between Niuean resident translators and editors, typesetters, and publishers in Samoa (and in Sydney and later London). As already noted, given that the early texts were translated by Samoan teachers from Samoan into Niuean and edited and revised by the 'Samoast' Pratt (he also advised W.G. Lawes), it is not surprising that the Niuean Bible was heavily influenced by the Samoan language. In Niue there is currently a committee in session, in association with the Bible Society of Melbourne, to review the translation and orthographic conventions. By and large it is recognised that the 'first' translation was done badly, with many misspellings and other shortcomings. On the other hand there are many Niueans who consider this text sacrosanct, even to the extent that some words have changed in pronunciation to accommodate spelling errors.

The 'naming' of the Niuean consonant letters, as invented by the missionaries, is also important to note (in Tregear and Smith 1907:3, it is given incomplete and/or wrongly):

f a, ga, ha, ka, la, mo, nu, pi, ti, vi (ro, sa)

This naming scheme can influence the way which borrowings (mainly from English) are transliterated, especially as English consonant clusters have to be split up by inserting vowels. Note that *ti* is pronounced [ti], contrary to the Niuean rule of pronouncing *t* as [s] before high vowels (*i, e*).

The spelling conventions evolved so far also found their way into the influential book by Loeb (1926) *History and traditions of Niue* which is consulted to this day by many Niueans.

2.2 McEwen (1970)

The next substantial published account that deals with orthographic conventions is that of McEwen's (1970) *Niue dictionary*. His treatment of the Niuean alphabet has a number of innovations: vowels are either short (never marked) or long (with macron) or 'double' (for details see §2.4.2). Letters *s* and *r* (to a lesser degree) are added to the consonants, and *ng* replaces *g*.

McEwen's unilateral decision to change *g* to *ng* was met by Niueans with derision: the Niue Assembly even carried a motion 'deploring' the use of *ng*, thus virtually outlawing the new dictionary, at least for the public sector (especially education). Consequently the archaic orthographic conventions first summarised by Tregear and Smith (1907) are still in force today. Many Niueans view the Bible (as used by virtually all the churches in Niue) as setting

the orthographic standards, and in view of McEwen's unfortunate experiment, many Niueans are highly suspicious about any attempts to reform such conventions.

2.3 Rex et al. (1981)

A small booklet entitled *Everyday words and phrases in English and Niuean* was published by the USP Niue Extension Centre, being a revised and edited version of a similar booklet devised by the National Council of Women of New Zealand for five Pacific languages, namely Samoan, Cook Islands Maori, Tokelauan, Tongan and Niuean. Six Niuean language experts under Leslie Rex, the long time official translator for the Niuean Government (he was also the principal informant and collaborator for McEwen), were responsible for the revision, and it was approved by the Niuean Language Committee (which later became defunct, but recently was revived as the Niue Language Commission). Given this 'authoritative' background their 'Guide to Pronunciation' is interesting, notably that 'double vowels' are described as:

Two vowels the same in a word (e.g. *maama*) are each pronounced but run together to form almost one sound. Two different vowels (e.g. as in *koe*) are each pronounced but also run smoothly together. (Rex et al. 1981:iv)

Note that *g* is in use, but no 'long vowels' (with macron or marked in any other way). The 'double vowel' as described above is used only sparingly and never word initially or finally. The spelling system thus mirrors that of popular usage which largely disregards long or rearticulated vowels. The booklet, however, as it was designed primarily for 'palagi' language learners, was not noticed by Niueans themselves.

2.4 Niue dictionary project

With the inauguration of the present Dictionary Project it seemed a good opportunity to make a new start, based on the informed consent of the Dictionary Panel (who represent the public at large). As can be imagined this process is both difficult and time consuming; 'difficult' because the technicalities involved are rather complex, 'time consuming' because consensus building in a fiercely egalitarian Niuean society involves myriads of individual points of views.

Some issues, however, could be resolved quickly: the return to *g* as the grapheme for the velar nasal (even though the *ng* has been adopted for a few names such as *Tongatule*, and presumably will remain so); no need for marking short vowels with the macron even in exceptional cases; adoption of *s* as a dictionary letter (there are many words beginning with *s*) but not *r* (since there are no transliterated words beginning with *r*).

The biggest headache was the question of how to deal with long vowels, which involved first the question of how to recognise and define a long vowel, and then how to represent it as a grapheme.

2.4.1 How to mark long vowels

Let us assume that we recognise long vowels without difficulty: the options before us are to write a long vowel as a 'double vowel' or as a 'single vowel with a macron' (one could imagine other options, but none were acceptable to all involved). As is well known from New

Zealand Maori, choosing between these two options can inflame the hearts and minds of linguists and innocent language users alike. There is the argument that the use of macrons is counterproductive because it is not commonly available on typewriters (and still not available on many text editors on computer, or if available it cannot readily be exported to other editors requiring different keystrokes, etc.). In handwriting too, it is argued, macrons will be largely left out because they are too cumbersome to apply, as Niueans (and New Zealand Maori) are used to the English script (but, cry the proponents, the French and Germans, and many more besides, have no difficulty in applying their various diacritics!). Writing 'double vowels' is seen as no problem, particularly for those used to English spelling conventions (frequently using 'ee' and 'oo', but rarely 'aa', and rarely if ever 'uu' and 'ii'). In defence of the 'macron' it is argued that technology should bow to common (linguistic?) sense (if one needs macrons then demand a typewriter that has them, etc.), and that the macron is visually neat, especially for languages which have a lot of vowel use ((C)V syllable rule in Niuean). In the process of word formation it can happen that two long vowels meet (and phonetically remain a rearticulated sequence), necessitating four vowels in a row (under the 'double vowel' convention) which looks 'terrible'. Then there is the tricky question of how to distinguish between a 'double vowel' and 'two rearticulated (same) vowels'.

Within the Niuean context this thorny issue was made even thornier because the international consultant to the project, Professor Bruce Biggs, is a great champion of the 'double vowel' convention (for NZ Maori – but is satisfied with the macron version in Cook Islands Maori, while for Niuean he considers either as adequate, but prefers the 'double vowel' because of rule simplicity). However he clearly stated early on that the final decision must be that of the Dictionary Panel. Nevertheless he was confronted with a popular spelling system that lacked consistent rules for writing short and long vowels.

Niueans positively hate to see double vowels (or more) at the end of a word; they don't mind them in the middle of a word; they don't much like them at the beginning of a word (but are willing to be convinced otherwise in this instance); they hate to see a sequence of more than two same vowels (though they are quite happy with other sequences, as in the word *moui*). If you have to mark a long vowel at the end of a word you 'must' use a macron. Many Niueans regard the macron as not so much a sign for a 'long' vowel as a stress sign, especially when applied to final vowels (see McEwen's (1970) 'stress and intonation' rule which states that words ending in a long vowel will also receive stress on that last syllable). Many Niueans largely disregard 'long' vowels when writing, only using them in contexts where there is possible confusion (minimal pairs), a practice that largely mirrors that of the Bible.

From a purely linguistic point of view, this system (if it is one) needed to be reformed, because, even if one disregards the choice of orthographic conventions, one must insist that a language be written as it is pronounced. Failure to do so will only result in a crazy system (if it is one) as evident in English. What's more, clearly established rules within Polynesian languages **ought** to be upheld in any new dictionary:

- P1. Polynesian languages generally distinguish between short and long vowels, and that distinction *ought* to be upheld in the written form (some contrasts between long and short vowel can however be neutralised under certain statable conditions).
- P2. Polynesian monosyllabic words with lexical content have a long vowel.

Pitted against this is the popular Niuean rule, which could be formally stated thus:

- N1. Mark long vowels (with a macron) only to avoid homographs (words spelt the same but pronounced differently).
- N2. Word-final long vowels in words with two (or more) syllables **should** be marked (with a macron) regardless of whether or not homographs would result, since the final long vowel also confers stress (which normally is on the penultimate syllable).

Note that N2 is a weaker rule than N1 (the rule is strongest when N1 and N2 coincide, as in *malolo* 'fall' versus *malolō* 'strong'). The very word *Niuē*, with stress on the last syllable, is rarely written as it should be – it was so written by Tregear and Smith (but strangely McEwen used the 'anglicised' version 'Niue' on his cover!) The anglicised (sic) version *Niue* is used in Niuean texts. Rules (sic) N1 and N2 are in common use today, as evidenced in the local weekly newspaper the 'Niue Star' or in Government documents (usually translated from English into Niuean), in primary education readers, or in one of the few 'general' publications in Niuean such as *Niue: a history of the island* (Chapman et al. 1982), written in both Niuean and English.

2.4.2 How to determine vowel quality

...Polynesian languages...have just five vowel sounds. They are represented conveniently by the five vowel letters of our English alphabet. Each vowel is either long or short. The distinction between long vowels and short vowels carries meaning and is all-pervasive (every vowel is either long or short). There is an extraordinarily persistent misconception that it is only necessary to mark a long vowel in a word to distinguish it from some other word which differs only by having a short vowel. Nothing could be further from the truth. (Biggs 1990:7)

The length of vowels in individual forms, however, is often difficult to reconstruct, and many sources fail to indicate it. (Clark 1976:24)

Let us assume for the moment that rules P1 and P2 are to be implemented for the Niuean dictionary. The following questions arise:

- what depth of linguistic analysis is required with regard to Niuean phonetics, phonology and morphophonology (understood to be the interface between phonology and morphology, and as developed by Dressler 1985) in order to establish vowel quality?
- if vowel quality is established in a root word, what exactly happens to long vowels when word formation occurs (affixation, reduplication, compounding, contraction)?
- how is such derived knowledge translated into spelling conventions acceptable to the Dictionary Panel?

It must be noted that to date no in-depth phonetic (phonological or morphonological) study of Niuean has been done. Obviously the person best suited to do such a study would be a native speaker trained in linguistics, or, to a lesser degree, a linguist fluent in Niuean. Neither of these choices has been available so far. The present linguist-resident-lexicographer has been 'learning' Niuean on the job for some two years, and he has 'trained' the members of the Dictionary Panel in the essentials of dictionary making (which could be described also as 'linguistics'). The outcome within these constraints, by all accounts, has been excellent, but nevertheless they lack the expertise to confidently tackle the above questions. In this context it is also important to note McEwen's (1970) contribution, who as

a noted amateur linguist and competent speaker of Niuean (he spent some ten years on Niue as a Resident Commissioner) grappled with the same questions.

So what were the points of departure for the NDP?

There are any number of 'minimal pairs' that prove that there is a phonological contrast between short and long vowels in Niuean, for example:

- (1) *moli* 'orange'
mōli 'lamp'

This, however, within general linguistic theory, does not mean that there will be a short/long vowel contrast in every phonological position. Apart from having the short/long contrast only in storable positions, there may be cases of neutralisation, free variation, dialect variants or conditioned variants. Professor Biggs (pers. comm.) gives an example from NZ Maori (note his orthographic convention of writing long vowels as 'double' vowels):

/a/ preceding stressed */Caa/* is always phonetically quite long. In this position there is no contrast between long */aa/* and short */a/*. We can say that the contrast between */a/* and */aa/* is neutralised under storable conditions. The linguist will describe this situation variously according to his theoretical background. The lexicographer, having determined the facts, can choose to write *ataarangi* or *aataarangi*.

I am afraid that such comparable depth of analysis is not yet available for Niuean. Pending further research the NDP has taken the probably simplistic view that a vowel is either short or long in any position. Members of the panel were convinced by the linguistic facts that their language makes this basic distinction, and henceforth members called on their linguistic intuition to determine in each case whether a vowel is short or long. This procedure extends to derived words, and indeed some trends and rules were established with regard to the question of long vowels in derivational processes (for details see below and §2.4.3).

Still, this was not the end of the story. An initially baffling phenomenon in Niuean is the existence of many synchronic base words (they 'may' be derived diachronically) which have rearticulated same vowels, such as:

- (2)a. *mooli* 'true'
 b. *haana*, *haau*, *haaku* 'his/her/its, your, my'

Synchronically closely related are such words as *fakaalofa* 'greeting' which have been lexicalised and where the derivation is not fully transparent. While *faka-* is clearly a common prefix, there is no extant Niuean word **alofa* (neither perhaps **a-lofa*, but there is a word *ofa* 'love'). Diachronically it is rather obvious that the rearticulated *-aa-* sequence is across a morpheme boundary, but as we know from linguistic dogma, such data cannot determine synchronic facts, it can only confirm them. Another such related example is *aafe* 'turn' which historically is a partially reduplicated form of **afe* (not extant in Niuean, though the fully reduplicated form *afeafe* is).

Synchronically related (or arguably not related) are those rearticulated same vowel sequences which arise synchronically across morpheme boundaries from derivation, such as reduplication, affixation and compounding, as in:

- (3) *fakaatāaga* 'permission' (the root word is *atā* 'free'; *faka-* is a causative prefix; and *-aga* is a nominalising suffix.)

To account for these phenomena I was initially drawn to the idea that the 'rearticulated' vowels in root words like *mooli* 'true' were in fact a vowel quality attributable to a single vowel segment (similar to a diphthong perhaps, but in any case in additional contrast to 'short' and 'long'). Rearticulation arising from synchronic derivational processes I would consider a different phenomenon. In this I followed McEwen (1970:x) who made a similar three-way distinction (short-long-double, whereby the word 'double' is distinct from 'rearticulation' proper), that can be characterised as follows:

- E1. 'Short vowels' can occur in all environments and are written as a plain vowel.
- E2. 'Long vowels' can occur in all environments and are written with a macron.
- E3. 'Double vowels' are the result of diachronic consonant elision or vowel assimilation. The stress fall on the second vowel.
- E4. Rearticulated same vowel sequences occur across morpheme boundaries as in derivational processes.

E1, E2 and E3 refer to the three-way distinction of vowel quality.

For E3, McEwen does not elaborate how that stress rule integrates with the general stress rule (on penultimate syllable), but since practically all words with double vowels are disyllabic with the double vowel in penultimate position, there is no problem; double vowels thereby also cannot enter into any cross-morphemic processes. For E4 McEwen does not elaborate on the possible sequences, but those observed are 'short-short', 'short-long' and 'long-short'. McEwen (1970) is uncertain about base words which have 'rearticulated' vowels but cannot be 'derived' accordingly. Such cases he presents in a rather contorted way:

MŌLI adj. true, correct. NOTE: This word is more properly written *mooli* as the letter *o* is usually pronounced twice, with the accent on the second. It is the same word as *Maori* in New Zealand. *Ao* tends to become *oo* in Niue.

If McEwen had known the relevant proto Polynesian form to be **maaqoli* would he have suggested that the Niuean witness resulted from both consonant elision (glottal stop) and vowel assimilation?

As Professor Biggs has pointed out (pers.comm.), both McEwen and I, by placing undue emphasis on diachronic data, failed to see that in each synchronic case of such double vowels the stress fell on the second one, hence the apparent three-way distinction [short]-[long]-[double] is reduced to the basic two-way distinction of [short]-[long or double]. In synchronic terms there seemed to be supporting evidence from Tongan (and Niuean is after all a Tongic language, with Tongan being its closest relative) where long vowels in penultimate position tend to become rearticulated with stress on the second (Biggs pers. comm.).

After prolonged discussion of these 'linguistic facts' with the Dictionary Panel, a consensus was reached whereby this observation was elevated to a rule:

NDP1: long vowels in penultimate position (and under the condition that there is no final long vowel) become rearticulated with stress on the second.

The whole rule convention with regard to long vowels was determined thus:

NDP-LV: If a long vowel occurs at the end of a word it is written with a macron; elsewhere it is written as a double vowel. If the second half of a double vowel is penultimate it is rearticulated receiving stress; otherwise it is heard as a single vowel.

Hence in words like *kaalagi* 'a bird' the double vowel /aa/ is a single long vowel, while in a word like *faanau* 'children' the second part of the double vowel falls on the penultimate, hence it is rearticulated and stressed. In words like *malolō* 'strong' the final long vowel is written with a macron.

At this juncture it became evident that the Niuean stress rule, apart from the basic 'stress on the penultimate', must include the exception whereby a long vowel at the end of a word receives primary stress. Indeed it was observed that long vowels in general attract a measure of stress. The question arose if a double vowel in penultimate position would still be rearticulated if the word ended in a long vowel with primary stress. Initial tests seemed to indicate that a secondary stress on the penultimate still had this effect. Long vowels in non-final and non-penultimate positions would also receive a secondary stress (or conceivably 'tertiary'), but would remain as a long 'single' vowel. Stress in Niuean also requires further study (see also Hooper (1986:xiii), who for Tokelauan makes the observation that "stress is a complicated matter, and has not been systematically studied yet", and Elbert and Pukui (1986:xvii) state in their Hawaiian dictionary that "contrary to many statements about Polynesian languages, there are no rules to predict which syllable will be stressed in words of more than four syllables").

The NDP-IV rule, in combination with the extended stress rule elaborated above, was applied to word formations also, such as full reduplication:

- (4) *tā* 'to hit'
 taatā 'to hit continuously'

where according to our rule a long vowel moves into penultimate position and thus becomes a rearticulated double vowel with stress on the second.

The main shortcoming of this system was that using both double (in non-final, non-penultimate positions) and macron for long vowels creates unnecessary confusion. Essentially it was a compromise solution to the question as to whether it was better to write long vowels as double or with a macron.

However, as part of the evolving learning process between all concerned, the native speakers on the Dictionary Panel became more and more expert linguists (and the resident linguist became more competent in Niuean – and possibly linguistics) and they became more assertive as to what they knew to be the 'proper' pronunciation: it appeared that the system adopted led to some wrong results.

In particular it seemed that the rule requiring all penultimate long vowels to be rearticulated is incorrect. The long 'penultimate' vowel in *fānau* (until then written as *faanau*) is pronounced as a single long vowel. However there are words where the double 'rearticulated' vowel remains, as in *haaku*, *mooli*. No synchronic rule could however be found to determine which words have those 'double' vowels (the diachronic data merely help to confirm), and as such the 'double' vowel remains an idiosyncratic feature of Niuean. While it is true that in base words the rearticulated double vowel only appears in penultimate position, native speakers are now adamant that the rearticulation remains even when derivational processes shift it to another position, as in:

- (5) *fakamooliaga* 'evidence' (made up of *faka-*, *mooli*, *-aga*)

It was therefore proposed to do away with the convention of writing a long vowel with a macron only at the end of a word. The decision was taken to write all long vowels with a macron.

Furthermore, since the idiosyncratic 'double' vowel is essentially (phonologically) not different from any other rearticulation, one can do away with the notion of double vowels as well.

Altogether this results in a straightforward orthographic convention which can be 'read back' with the correct pronunciation in virtually all cases:

NDP: all long vowels are written with macron; all same vowel sequences are rearticulated.

Note that the dictionary will clearly indicate which same vowel sequences are the result of derivation (rearticulation across morpheme boundaries), and which are confined to base-word internal positions. The only difficulty remaining on the surface is to distinguish diphthongs from rearticulated vowel sequences (most of which arise from derivational processes, and are indicated as such in the dictionary), as in:

- (6) *fouu* 'new' which according to our rule so far could be pronounced
(or 'read back') as *fo-o-u* or *fo-ou*.

To account for the correct pronunciation of *fo-ou*, the rule can be amended to say that the maximum number of segments to be rearticulated within base words is two. For the example above this is also confirmed by diachronic data, e.g. PN **foqou* 'new'. Note that McEwen's solution for this particular item is *fōu*, and while logically possible, it is not born out by the actual pronunciation.

A small remaining problem is the suspicion that the rearticulated double vowel in base words may not be restricted to the penultimate syllable (in mostly disyllabic words). Given the Niueans' dislike of seeing double vowels at the end of a word, does this interfere with the discovery of such words? Since there are very few possible examples (all are suspected on diachronic grounds) I will not push the issue, and only present these examples for discussion:

- (7)a. *fā* 'four' (**faa* 'four')
fāgofulu 'forty' (*fā* 'four' and *gofulu* 'ten')
- b. *fā* 'habitual' (**faqa* 'habitual')
fāvale 'wild' (*fā* 'habitual' and *vale* 'fierce')

The homonyms differ in their historical roots. While *fā* 'four' is pronounced with a long vowel (as is its historical root), it may be that *faa* 'habitual' is rearticulated as a double vowel (reflecting the loss of the intervocalic glottal stop).

Nevertheless the orthographic conventions arrived at so far by NDP are more consistent (and more correctly reflect the pronunciation) than any spelling system Niuean has had before. This is demonstrated in the following table:

Table 1: NDP orthographic conventions compared with other spelling systems

NDP	Proto Polynesian	McEwen	Tregear & Smith	Bible
<i>mā</i> 'ashamed'	* <i>maa</i> 'ashamed, embarrassed'	<i>mā</i>	<i>mā</i>	<i>ma/mā</i>
<i>falō</i> 'lash'	* <i>faaloo</i> 'stretch, tighten'	<i>falō</i>	<i>fālō</i>	–
<i>mooli</i> 'lamp'	* <i>moolii</i> 'oil, lamp'	<i>molī</i>	<i>molī</i>	<i>moli</i>
<i>fā</i> 'pandanus'	* <i>fara</i> 'pandanus'	<i>fā</i>	<i>fa</i>	–
<i>tū</i> 'stand'	* <i>tuqu</i> 'stand, be upright'	<i>tū</i>	<i>tu</i>	<i>tu</i>
<i>mo</i> 'for'	* <i>moqo</i> 'for'	<i>mo</i>	<i>mo</i>	<i>mo</i>
<i>meā</i> 'clean'	* <i>meqaa</i> 'clean'	<i>meā</i>	<i>meā</i>	<i>mea/meā</i>
<i>mooli</i> 'true'	* <i>maaqoli</i> 'true, right, genuine'	<i>mīōli</i>	<i>mōli</i>	<i>mooli</i>
<i>mōli</i> 'lamp'	* <i>moolii</i> 'oil, lamp'	<i>molī</i>	<i>molī</i>	<i>moli</i>
<i>maama</i> 'bright'	* <i>maa-rama</i> 'light, bright...'	<i>maama</i>	–	<i>maama</i>
<i>fānau</i> 'children'	* <i>faanau</i> 'offspring'	<i>fānau</i>	<i>fānau</i>	<i>fanau</i>
<i>aafu</i> 'sultry'	* <i>qafu</i> 'hot and humid'	<i>afu</i>	–	–
<i>aahi</i> 'visit'	* <i>qasi</i> , * <i>qaqasi</i> 'visit'	<i>āhi</i>	<i>ahi</i>	<i>ahi</i>
<i>nākai</i> 'not'	–	<i>nākai</i>	<i>nakai</i>	<i>nakai</i>
<i>foou</i> 'new'	* <i>foqou</i> 'new'	<i>fōu</i>	<i>fou</i>	<i>foou</i>
<i>kālagi</i> 'a bird'	–	<i>kālangi</i>	<i>kalagi</i>	–
<i>fēkouna</i> 'send'	–	<i>fēkouna</i>	<i>fēkouna</i>	–
<i>malolō</i> 'strong'	* <i>maaloo</i> , * <i>maalooloo</i> 'strong'	<i>malōlo</i>	<i>malōlo</i>	<i>malolo</i>
<i>malolo</i> 'fall'	* <i>malolo</i> 'fall'	<i>malolo</i>	<i>malōlō</i>	<i>malōlō</i>

2.4.3 More on word formation

Polynesian languages, with their relatively small quantity of root words (Krupa 1982:32), add to the lexicon with extraordinarily wide-ranging word formation (mainly derivational). Niuean is no exception, and indeed the Niuean Dictionary Project has adopted as its 'philosophical' basis for the dictionary a derivational approach, namely detailing under every lexical root (headword entry) the whole range of derived items.

With regard to our present investigation the question arises as to what exactly happens to long and word-internal re-articulated vowels in derivational processes, both in terms of their phonemic status and as graphemes (where the latter should reflect the former).

To address the question adequately we must first distinguish between historically underived and derived root words, both of which undergo synchronic derivation, but may differ in morphophonemic processes. Often a further difficulty is that a particular root word may be clearly derived historically (say, via partial reduplication), but the historical root is still present in other derivations (though never by itself). Consider the following examples (morphemes given in waved brackets):

- (8)a. *fakafana* {*faka*, *fana*} 'warm up food' [PN **faka-fana* 'reheat food']
- b. *fanahi* {*fana*, *hi*} 'apply heat' [EP **fana* 'heat']
fanafanahi {*fana*, *fana*, *hi*} 'keep applying heat'

- c. *mafana* {*ma, fana*} 'warm' [PN **ma-fana* 'warm']
 mafanafana {*ma, fana, fana*}
 fakamafana {*faka, ma, fana*}
 mafanatia {*ma, fana, tia*}
 fakamafanatia {*faka, ma, fana, tia*}

It may look attractive to list all these words under the historical (and synchronically hypothetical) root *fana*. This approach was adopted by McEwen with the convention of placing a 'line' behind such non-existent root words and listing the 'derivations' under it. However, in order to adopt a rigorously historical approach to dictionary making one must have historical records, which for Niuean are simply not available. The above example is clear-cut enough, but there are many items where a perceived 'historical' derivation is merely speculation (POLLEX has information on a quarter of the 10,000 or so Niuean words so far listed in NDP (Biggs et al. 1993)). To be on the safe side, NDP has adopted the policy that derivations can only be detailed if all the constituent parts are extant, that is, occur either as lexical words by themselves or as productive or semi-productive derivational devices, such as affixes. There are quite a few cases where one constituent is extant, but not the other. All such words are entered as separate headwords, though sometimes flagged with a possible historical derivation suggestion.

Particularly difficult are those words which may arise from a partial reduplication of the first syllable of the type V(V). Such reduplication should first lead to a re-articulated vowel sequence V(V)#V(V) which in turn may undergo further phonemic processes (such as shortening, assimilation). If there is no extant unreduplicated lexical root, how can we then distinguish between a long vowel and a rearticulated vowel sequence? If speakers in their pronunciation vacillate between the two, we are well and truly lost.

A variation of the theme is when words with more than two syllables reduplicate only the last two syllables. For Tokelauan, Hooper (1986:xvi) stated that:

When a word has more than two syllables, it is usually the case that historically the extra syllable or syllables were an affix. This part of the word is not reduplicated: *havili*, *hāvilivili*, *poloaki*, *polopoloaki*. Vowel lengthening in the first syllable of a word is often associated with reduplication.

In Niuean, to distinguish between historically partially reduplicated and unreduplicated is often conjecture. Consider these two words:

- (9)a. *aafu* 'sultry' ... **qafu* 'hot and humid'
 afuafu 'hot'
 b. *aahi* 'visit' ... **qasi*, **qaqasi* 'visit'
 ahiahi 'visit frequently'

From this information it would be reasonable to infer that *aahi* is a historically partially reduplicated form, while *aafu* is less likely so. McEwen's solution, in view of the protoforms (which were not available to him), is most unlikely, at least for his *āhi* (asserting that the initial vowel is long). Before inquiring into the respective initial vowel qualities, let us look at a synchronically reduplicated example:

- (10) *ene* 'poke' ... **gene* 'tickle'
 eene 'poke slowly'
 eneene 'poke frequently'
 fakaeneene 'wary'
 maeneene 'ticklish' ... **ma-gene* 'tickle'

It appears quite clear to me that *eene* is a partially reduplicated form of *ene*, and *eneene* is fully reduplicated. The morpheme boundaries of all derived forms of *ene* can be given thus:

- (11) *eene* {*e*, *ene*}
 eneene {*ene*, *ene*}
 fakaeneene {*faka*, *ene*, *ene*}
 maeneene {*ma*, *ene*, *ene*}

Given our dictionary rule that all morphemes must be synchronically attested, the best we can do for the examples in (9) is:

- (12)a. *afuafu* {*afu*, *afu*} but not {*a*, *afu*}
 b. *ahiahi* {*ahi*, *ahi*} but not {*a*, *ahi*} even though there is good historical evidence for it.

The vowel quality in *eene* (*e*, *ene*) is quite clearly ‘rearticulated’ across a morpheme boundary, and only if one can invoke a further morphophonological rule (such as vowel assimilation) can this status change. I believe that no such synchronic rule exists for this word, hence the *ee* sequence is rearticulated, as is in fact born out by the common pronunciation of this word, with stress on the second *e*. The same can be said of *aāfu* and *aāhi*.

But really only for *eene* or *eneene* can we assert that these words could never be written with a long vowel *_*ne* or *_*en_ne* because that would violate the rule that same vowel sequences across morpheme boundaries are rearticulated (regardless of what the vowel qualities may be – the question as to what happens to long vowels in such instances is another question altogether, addressed below).

So what does happen to long and rearticulated double vowels when they end up, via derivation, in a word of more than two syllables preceding the penultimate syllable?

- (13) *aaki* ‘take out’
 akiaki ‘take out frequently’ {*aaki*, *aaki*}
 maaki ‘faded’ {*ma*, *aaki*} {Prefix, take out}
 taaki ‘uproot’ {*ta*, *aaki*} {Prefix, take out}
- (14) *atā* ‘free’ ... *_*qataa* ‘free’
 fakaatāaga ‘permission’ {*faka*, *atā*, *aga*} {Prefix, free, Suffix}
- (15) *mā* ‘shy’ ... *_*maa* ‘ashamed’
 femāaki ‘to be shy of each other’ {*fe*, *mā*, *aki*} {Prefix, shy, Suffix}
- (16) *maā* ‘in-law’
 femaāaki ‘to marry {between children of in-laws}’ {*fe*, *maā*, *aki*} {Prefix, in-law, Suffix}
- (17) *ō* ‘go’
 omai ‘come {subject plural}’
- (18) *peehi* ‘wreck’
 pēhia ‘to be squashed’
 pepeehi ‘to press continuously’

- (19)a. *femaāaki* 'to intermarry' {*fe, maā, aki*} {Prefix, in-law, Suffix}
 b. *fakafehagaaoki* 'to face one another' {*faka, fe, haga, ao, aki*}
 {Prefix, Prefix, turn, front, Suffix}

As can be seen in examples (14) to (16), the long vowel remains in many cases. In (13) the rearticulated double vowel reduces to one, the reason presumably being that words like *aaki*, *aafu*, *aahi* are historically derived as partially reduplicated, hence in other word formations the original unreduplicated form is used, such as in *akiaki*. In (17) we see the long vowel shortened, and in (18) we see a reduplicated double vowel changed to a long vowel. Examples in (19) demonstrate the (rare) occurrence of multiple rearticulation.

Sound changes in derivations are dealt with on a case by case basis. No rules have been established so far. Further study is required.

3 Conclusion

After some two years of intense preoccupation with the Niuean spelling system we arrived at what at this stage appears to be the best possible outcome. In the course of this very steep learning curve we took some wrong roads, but eventually returned to the main highway. Niuean lexicography is still in its infancy and one should not expect 'final solutions'. It remains to be seen if the Niuean public will be happy with the outcome. The question of vowel quality and how to handle it orthographically will surely occupy the minds of many in the future. A case in point is Tokelau: while the *Tokelau dictionary* (1986) took pains to distinguish long vowels with a macron, a later work (Hovdhaugen et al. 1989:20) reports that a Tokelau teachers' workshop has decided not to use the macron (i.e. not mark long vowels at all) for school books in Tokelauan.

Fakaauē! Thank you! – spelling variations (misspelling?): *fakaue*, (*fakaoue*, as in McEwen 1970).

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19 *The discontinuous member of the continuous duo in Maori*

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1 Introduction

Nowadays, because I am from the north of New Zealand, which forms part of the Western Maori dialect area, my greeting to a Maori-speaking friend would probably include the phrase:

- (1) (E) peehea ana koe?
A how A you.SG¹
'How are you?'

If I were from the East Coast, the most likely equivalent phrase would be:

- (2) Kai te peehea koe?
A(at the) how you
'How are you?'

To avoid confusion, for the remainder of this paper pseudo-verbal² *kai te* (as it is usually pronounced in the Eastern dialect area) will be written *kei te*, as it is pronounced in the western area. Also Eastern and Western will denote the respective dialect areas.

¹ Abbreviations used in interlinear glosses are:

A	aspect marker	LOC	locative
AE...AE	actor emphatic (past)	MOD	modal
CAUS	causative prefix	NEG	negator
DIN	directional particle/indirect object marker	PASS	passive suffix
DOB	direct object marker	PL	plural
ICV	inceptive	SG	singular
FOC	focus particle		

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In §2 of this paper, the meanings of *kei te* and *e...ana* will be described briefly, then their respective distributions in modern text will be compared in an attempt to discover whether there is any difference in their eligibility to occur in particular contexts.

Section 3 questions: (1) whether the widely reputed regional preference for one or other of these two continuous aspect forms has any basis in fact, (2) if such is the case now, was it always so, and (3) if it was not always so, is there any identifiable force which might have encouraged change.

2 Meanings and textual distribution of *kei te* and *e...V...ana*

2.1 Meaning of *kei te*

Kei te will be dealt with first because it is slightly less versatile than *e...ana*. First, three earlier perspectives on this somewhat intractable construction are presented:

Williams and Williams (1923:35) refers to constructions approximating the infinitive mood in Maori wherein “the Verb is treated as a Noun and can be preceded by any demonstrative word or a preposition or a transitive verb”, adding that “With the preposition *kei*, the infinitive is used to form a present imperfect tense, and with *i* a past imperfect: -*Kei te karanga nga tangata, the men are calling (a calling)*. ...*I te karanga nga tangata, the men were calling*.” Wills (1956:25), a secondary school teacher, called *kei* and *i* “shockingly energetic prepositions,” giving the example *Kei te mahi a Maatenga*, glossed ‘Maatenga is at work’ or ‘Maatenga is working’, and labelling *kei te* “a Present Continuous Tense.”

A native speaker and experienced teacher, Waititi (1978, 2:208), in a series commissioned in the 1960s by the NZ Education Department, glossed *Kei te moe a Rewi* as ‘Rewi is (in the act of) sleeping’ (emphasis mine). Waititi’s gloss invites mention of the fact that several languages show a relationship between locative constructions and progressive or durative aspect, as noted by, for example, Comrie (1976:99), Mufwene (1984:28-30) and Jespersen (1931:168). Comrie includes the Celtic languages in his list, noting that they make particularly widespread use of locative expressions, which tend to cover the whole range of imperfective meaning (which is concerned with the internal temporal structure of the verb predicate, and includes continuous and habitual situations), not just progressive. It is generally accepted that the latter denotes continuous dynamic situations as opposed to states (but see cautionary note below).³ Later in this paper it will be suggested that a particular emphasis often conveyed by *kei te* (rather than *e...ana*) reflects its locative origin.

² The term ‘pseudo-verbal continuous’ is used here to distinguish this use of the form from purely locative uses of the same form. The term ‘pseudo-verbal continuous’ was first applied by Biggs (1969:86) to *kei te* when referring to the present or future, or *i te* when referring to the past.

³ *Situation* is used here, as in Hooper (1984:48), as a cover term for states (‘I am tired’), *processes* (‘day was dawning’), *activities* (‘she is writing’) or *events* (‘they reached the summit’). Hooper stresses that despite a strong affinity on the part of most verbs for a particular type of aspectual context, the classification of aspect “must be directed to particular types of verb predicate, not primarily to individual verbs.” In regard to at least the continuous-progressive distinction, Bybee et al. (1994:139) also question the accuracy of regarding particular verbs as incorporating specific aspect: “...a clear distinction between a progressive which is restricted to dynamic verbs and a continuous which is not does not emerge from our data.”

Bybee et al.⁴ (1994:136) state with reference to English that “the original meaning of the progressive construction is ‘the subject is **located in the midst of doing** something’” (emphasis mine). In Maori this meaning for *kei te* involves no great leap, as “the locative particles *ki, kei, i, hei*...have a common element of meaning in that each one indicates ‘position in space or time’” (Biggs 1969:39). It is made more explicit by Bybee et al. (1994:137) that no inferential leap occurs between the spatial and temporal domains, because a subject located spatially in an activity is necessarily also located temporally in that activity. They state moreover that the broadening of contexts of use (in this case for the temporal meaning) – an essential part of the grammaticisation process – would be effected through erosion of the strict locative meaning ‘to be in the midst of doing’.

A reasonable account [of how the spatial sense is lost leaving only the temporal] might postulate that at first the progressive is used where both spatial and temporal readings are reasonable, but gradually the construction is expanded to use with activities for which spatial location is less important and temporal involvement is more important – that is, from activities that take place at special locations such as ‘he is fishing’ or ‘he is bathing’ to activities that might take place at various locations such as ‘he is working’ or ‘he is helping someone’, finally to activities that imply no location, such as ‘he is talking’ or ‘he is singing’. ..The temporal may be more important more often, leading to the interpretation that the progressive basically signals temporal meaning.

(Bybee et al. 1994:291-292)

The remainder of what I presently have to say about *kei te* independently of *e...ana* consists of brief comment on relevant extracts from Bauer’s publication *Maori*, in which (1993:421) she calls *kei te* an absolute tense marker (non-past), with present rather than future as its default reading, noting that it also occurs in narrative as a historic present. *Ko te*, without an example, is also given as a dialectal variant of *kei te*, but in the only written examples I could find of this form with verbal sense (both from Stowell 1913:57) it seems to express simple future:

- (3)a. *Ko te whakaae pu a ia.*
‘He will most assuredly assent.’
- b. *Ko te haere mai pea raaua kia kite i aa koe.*
‘They two will probably come along to see you.’

This accords with oral responses I have received from some Nga Puhi informants, who use *ko te* as an alternative for the ‘inceptive’ (Biggs 1969:34) marker *ka* when a future (emphatic) reading is intended.

I now attempt to discover any contrast in meaning between *kei te* and *e...ana* by determining to what extent the former can substitute for *e...ana*, as some contexts of the latter are described below.

2.2 Meaning of *e...V...ana*

Maori *e...V...ana* has been classified as progressive by Dahl (1985:90) and continuous by most other writers. Reservations concerning Dahl’s classification, e.g. those of Mutu (1990:58), tend to be based on the definition of progressive aspect as combining progressive

⁴ I am grateful to Robert Early for pointing out to me the insights available on locative sources of aspect markers in this publication.

meaning and non-stative meaning, while *e...ana* marks both actions and states and is therefore continuous rather than progressive.

In a succinct but thorough description Hooper (1984:55-56) warns:

It is important to bear in mind the non-equivalence of this Maori imperfective form, which has the multiple functions of marking habitual, iterative, progressive and durative-stative aspect, and the English *be...ing*, which usually marks progressive, and can express stativity only in the case of a restricted range of verbs referring to temporary states, such as *live, stand, suffer, experience*. ...Now statives marked with *e...ana* are common enough: *e iti noa ana* 'is just a little', *e mahana ana* 'is warm', *e aahei ana* 'is able' (Biggs 1961:42). *E...ana* is, in fact, the typical marking of a verbal stative predicate in Maori. Its failure to occur with neuter verbs other than *mau* is not a consequence of their stativity, but of their non-stativity.

Bauer (1993:444-449) also points out that *e...ana* can be used for a wide range of durative situations, including progressive. She also observes (1993:416, 419) that both *e...ana* and independent *e* are relative tense markers, taking temporal reading from their respective contexts, and therefore could be the same morph, but decides that the evidence is inconclusive for *ana* as an independent continuative aspect marker, and therefore for a bimorphemic analysis of *e...ana*, since *ana* as an independent postverbal particle has sometimes punctual force and sometimes continuative. So for now *e...ana* continues to be analysed as a unitary marker of relative tense and continuous aspect, while *kei te* has the same aspectual value but is restricted to marking non-past tense.

Perhaps some difference in meaning or emphasis of the two constructions will emerge from observing where they occur close together in the same text. With this aim in mind three small samples of text are given below.

2.3 Contrast in meanings of *kei te* and *e...ana* suggested by their textual distribution

The short story below (Harawira 1954:76, 90) contains several examples of (variants of) *e...ana*, one occurrence of postverbal (here punctual) *o...ana* (line 5) and one of *kei te*.

(4) *Te Ngeru me te Kiore Paku.*

The Cat and the Mice.

1. *I nga ra katoa kotahi kiore*
LOC the.PL days all one mouse
'Every day one mouse
2. *e kainga ana e te ngeru,*
A eat.PASSA by the.SG cat
was eaten by the cat,
3. *ara whakatakariri nga kiore.*
and.then/upon.which CAUS.apprehensive the.PL mouse
which made the mice very unsettled.
4. *Ka karangatia he hui nui ma nga kiore.*
ICV call.PASS a meeting big for the mice
A great meeting of mice was called.

5. *I te nui o a ratou korero whakaaetia ana ko te mea*
LOC the many of their talk agree.PASS A FOC the thing
After much talk (it was) agreed that
6. *ma ratou he rapu i tetahi tikanga e moohiotia ai*
for them (was.to).seek DOB a method MOD know.PASS whereby
they should find a way to warn them (when)...
7. *kei te haere mai te ngeru.*
A travel hither the cat
the cat was coming.
8. *Na tetahi kiore iti i ki,*
AE a [certain] mouse little AE say
One young mouse suggested
9. *me here he pere ki te kaki o te ngeru.*
should tie a bell to the neck of the cat
fastening a bell to the cat's neck.
10. *Ka whiriwhiria he komiti mo taua mahi,*
ICV choose.PASS a committee for that work
A committee was elected to do the job,
11. *engari tae noa mai ki naianei kahore ano*
but reach limitless hither DIN now NEG yet
but until now they have not found
12. *he kiore e pai ana ki...*
a mouse A like A DIN
any mouse willing to (undertake it).'

Line 2 illustrates the use of *e...ana* to mark habituals, a function which *kei te* tends not to share (in any kind of clause). There are also examples of *e...ana* being used with passives (lines 2 and 5) and with a neuter verb (line 12).⁵ In the passage above *kei te* is substitutable in any of these. The single example of *kei te* marks an impending event, i.e. one of current urgency at the moment of speech.

The other two short texts are extracts of letters to the editor of the monthly newspaper *Pipi-wharauora*, from the randomly selected issue of January 1899. (Bennett 1899) They are included in this paper primarily to support a point in §3, and are described there in greater detail. A fairly literal translation follows each letter. It is necessary, in viewing these examples and others later in this paper, to know also that in relative clauses the *ana* of *e...V...ana* may assume one of the alternative forms *nei*, *na*, *ra* or *ai*. The choice of alternative form for *ana* is determined by the location, in space or time, of the referent of the head relative to both speaker and addressee.

Although this is a tiny data set, the tendencies noted hold also for the two corpora mentioned in §3.1 below.

⁵ The term neuter is used here as a verb category, reserving stative as an aspectual category, both as used by Hooper (1984:48-56).

- (5)a. *Tena koe e huihui nei¹ i o hipi kia noho roopu, e rapu nei² i nga mea kua ngaro, e kukume ake nei³ i nga mea i taka ki roto i nga poka....kei te hari⁴ kei te koa⁵ i naianei. ...Na tenei kei te whakapai atu⁶ kia koe e te Etita mo to tukunga mai i enei kupu whakamarama. A kei te hiahia⁷ tonu atu kia kite tonu. ...Heoi ehoe e tino hiahia ana⁸ ahau kia kite ite Nama 1, ... Tena koutou e hapai mai nei⁹ ito patu i hoatu kia koutou e te Pakeha. Tena koutou e kukume na¹⁰ i ena iwi i roto ite kino kia puta ki te pai. ...A tenei kei te whakawhetai¹¹ ki to tatou Matua....*

Greetings to you, gathering¹ your sheep to dwell in unity, seeking² those that are lost, drawing up³ those who fell into the pits....I am happy⁴ and elated⁵ today.... On account of this I am acknowledging⁶ you, oh editor, for your enlightening (me) by these explanations. Well, I really do look forward⁷ to actually seeing (your written views).... However, friend, I would very much like⁸ to see issue number 1.... Greetings to you all who are bearing⁹ the injustices dealt out to you by the Paakehaa. Greetings to you all, who are drawing¹⁰ people from evil into good.... Now this one is giving thanks¹¹ to our Father....

- b. *...‘e rua nga manu e patua ana¹² ki te kohatu kotahi...’...kia kapea aku reta i te wa e perehitia ai¹³ i roto i a ‘Te Pipi’.*

E hari ana¹⁴ au i te ... I rongo au Tukuta Mackellar e tuwhera ana¹⁵ tetahi o nga moni a Hune nei, a e hiahia ana¹⁶ ia kia ... Kei te whiriwhiri¹⁷ taku ngakau mo tetahi wahi ataahua ... e toru ano nga kainga e moohio ana¹⁸ i au,.... Kei te whakariterite¹⁹ au ki te Etita o te ‘Poverty Bay Herald,’ mo etahi korero e tukua atu ana²⁰ e au...

Two birds are being killed¹² with one stone... to duplicate my letters at the time of going to press¹³ in *Te Pipi*. I am happy¹⁴ because of the.... I heard (from) Doctor Mackellar that certain of the monies are coming available (lit. are opening¹⁵) this June, and he wants to¹⁶.... I am (lit. ‘my heart is’) searching¹⁷ for an appropriate place...there are three (suitable) homes that are known¹⁸ (of) by me,.... I am negotiating with the editor of the ‘Poverty Bay Herald’ concerning certain stories (written contributions) that are being¹⁹ (probably routinely) sent²⁰ by me...

Bauer (1993:425, 7-8) notes that *i te* (the variant of *kei te* used in past contexts) is quite rare in many subordinate constructions, as is *kei te*, the latter being particularly rare in relative clauses, where its place is taken by *e...ana*. This is borne out in both passages above, where clauses with superscripts 1, 2, 3, 9, 10, 12, 13, 18, and 20 are all relative clauses employing *e...ana* or a variant of it. Clauses 1, 2, 3, 9, and 10 also refer to habitual activities.

The *kei te* clauses, in contrast, (partly perhaps because all seven are in the first person, and letters to the editor are typically attitudinal) all refer to situations current at the moment of speech – some recently realised states (clauses 4 and 5) and two speech acts⁶ (effected by the performative verbs in clauses 6 and 11).

In the Mohi Ruatapu volume the environments of the aspect markers under discussion were:

kei te (including 4 instances of *i te*): 0 of a total 23 occurred in relative clauses.

e...ana: 42 of a total 205 occurred in relative clauses.

⁶ In the sense described by Crystal (1991:323).

These figures, as far as they go, support Bauer's statement on the comparatively restricted ability of *kei te* to enter into relative clauses, since if it were on a par with *e...ana* in this text we might expect the former to occur in five relative clauses. However, the small total number of occurrences of *kei te* means that this difference is not statistically significant,⁷ i.e. without a much larger number of occurrences the difference between the observed and expected results could be due to chance sampling fluctuations. Unfortunately the Ruatapu text contains the highest incidence of *kei te* that I have thus far been able to find in a single text, so the likelihood of resolving this question more convincingly at present seems remote.

That concludes my findings on differences in the kinds of clauses in which *kei te* and *e...ana* most commonly occur. There may be semantically based differences, such as the apparent tendency, when *kei te* occurs amongst instances of *e...ana* within a narrative (as in line 7 of the mouse story above), for the *e...ana* clauses to establish background conditions (as might be expected from this marker's durative meaning) while *kei te* emphasises salient actions and states that obtain at speech or reference time. This accords with the observation above that *kei te* tends not to occur with habituais, and with the point made by Bybee et al. (1994:152) that the validity of habitual statements extends over more than the actual moment of speech.

From purely textual distributions of our two alternates we proceed to investigate their past and present regional distributions.

3 The regional picture

3.1 The current regional picture

In Table 1 below are the final figures obtained in my (1991) MA thesis by computer search for the two variants in a northern corpus that I had gathered and processed over the two previous years. These scores were compared with those from the similar sized *Selected readings in Maori* (hereafter SRM) (Biggs et al., 1967), a regionally balanced nationally representative text, containing a near equal number of Eastern and Western contributions with fairly even total number of words in their respective sub-files. My corpus contains 50,528 words, and SRM 43,837. Although the Northern data below come from an independent corpus, Northland is part of the Western dialect area.

Table 1: *keit e* and *e...ana* in the eastern and western dialects

Markers	Northern	SRM Western	SRM Eastern
<i>e...V...ana</i>	238	107	93
<i>e...V...{nei,na,ra,ai}</i>	38	32	32
Total <i>e...V...ana</i>	276	139	125
<i>kei te</i>	11	13	31
Proportion <i>e...ana:kei te</i>	25:1	10.6:1	4:1

⁷ With only 22 degrees of freedom (no. cases in smaller sample minus 1), for the difference to be statistically significant, chi-squared values (= sum[(observed value-expected value) ²/expected value]) would need to be at least 33.92 and 40.29 at 5% and 1% confidence levels respectively. In the case above chi-squared=5 (Connolly & Sluckin 1958:91-94, 113).

From these data, the relative frequencies of the two forms in current Maori confirm accepted opinion on which form is preferred in each of the regions. *E...ana* is highly preferred in the west (especially in the northern sector thereof). According to Biggs (1969:86) "The Pseudo-verbal Continuous [*kei te*] is an extremely common construction in the Eastern Dialect area, where it largely replaces the *e...ana* tense of the Western Dialect area, which includes North Auckland and all of the North Island west of the Central Plateau and ranges." In the texts investigated here, however, *kei te* is seen to be relatively rare, even in the Eastern area.

So the answer to question 1 is 'yes.' Current Maori does show very definite regional preferences for one or other of the forms under discussion. In these texts there was just one occurrence of pseudo-verbal *i te* (past tense variant of *kei te*) in SRM and none in the Northern corpus, suggesting that this construction is now quite rare in the language as a whole.

The next task is to check how far back in the written literature of each region this pattern can be found.

3.2 The regional picture in the last 19th and early 20th centuries

Excerpts (5)a and (5)b in §2.3, dating from 1899, do not reflect anything like the current preference pattern for the two forms in question. Letter (5)a is from a Western correspondent and (5)b from an Eastern one. Only the sections containing these forms have been extracted.

These and other similar examples prompted me to investigate whether a similar distribution would be found by a computer search conducted on one sizable publication which could be regarded as typifying similarly early Western dialect, then on another text which would likewise represent early Eastern dialect. *Karanga Hokiana* (Tate 1986) was available for the west and *Ngaa Koorero a Mohi Ruatapu* (Reedy 1993) for the east.

Karanga Hokiana (hereafter KH) was produced in 1986 to help acquaint young local people with their own history and dialect, as exemplified in statements recorded (apparently verbatim) in the minutes of local land court hearings. While this volume did not contain a single instance of *kei te*, closer inspection showed it to be an extensively edited version of the manuscript of the Whakarapa (land) block minute books (Anon. 1903).

I did not search the manuscript (250 pages in this volume alone) in detail, but the second page of text yielded two occurrences of *kei te*:

- (6) *Kei te nui noa atu toku whakapai kito koutou huihuinga mai ki konei a e mahara ana ano hoki ahau kei te awhina koutou inga Ture ote Kaunihera Whenua Maori.*

'My acknowledgment (and pleasure) at your gathering here is absolutely unreserved, and I also bear in mind that (by your being here today) you are assisting (with) the laws of the Maori Land Council.'

This sentence was part of a statement made by the chairman of the committee, presumably a long term local resident, since all members of that committee were necessarily capable of evaluating the genealogies and occupational details of ancestors proffered by claimants as supporting evidence for their claims to lands (thereby established as having been) previously occupied by those ancestors.

The discrepancy in use of this one form between the two versions of KH does not imply deliberate distortion of claimants' language by the editor. Much of the book is not in the form of direct quotes, but is presented as narratives which incorporate the information content of

the original statements. The total absence of *kei te* in the book could, however, be an example of unthinking exclusion (from a volume compiled partly to preserve local dialect) of a form which is stigmatised in **current** local speech.

I had previously found, particularly with some of my Nga Puhi informants when comment was made on their infrequent use of *kei te*, that it is regarded by them as a substandard alternative to *e...ana*, and that in their opinion the only Northerners who would use it are "people just starting to learn Maori." Unfortunately I was not able to access, in time for inclusion in this paper, a source of minimally edited early western text which would allow a more conclusive evaluation on the (non-)employment of *kei te*.

As for the early eastern data, *Nga Korero a Mohi Ruatapu* is a volume containing Ngaati Porou history, myths and songs, written in 1871 and 1875 by Mohi Ruatapu, a revered *tohunga* 'wise person/expert' of that tribe. The only editorial alterations to this text involve punctuation, marking of vowel length and some paragraph division, so the text should be a good sample of the Ngaati Porou dialect of 125 years ago.

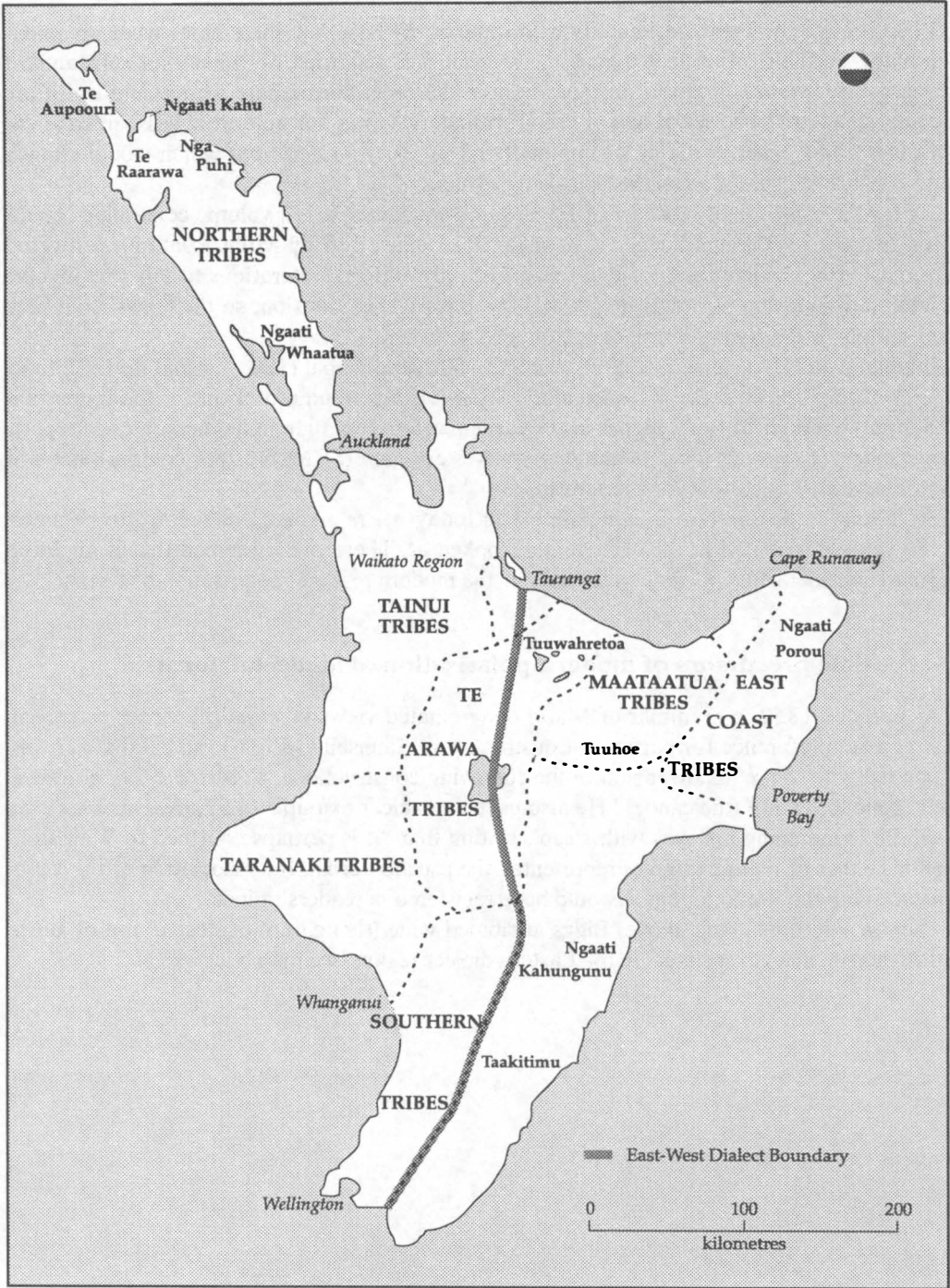
It contained 213 occurrences of *e...ana* and 16 pseudo verbal (12 *kei te* and 4 *i te*), a ratio of 13:1. Compared with the 4:1 ratio in the SRM Eastern column of Table 1, the proportion of *e...ana* is over three times higher in the earlier eastern text than in its modern counterpart, higher indeed than the 10.6:1 of the modern western area (SRM Western column), but still lower than the 25:1 current Northern ratio.

So in answer to question 2, compared with today *kei te* and *e...ana* seemed to be much more evenly distributed in the early texts I looked at. Therefore it seemed that it might be useful to consider some possible precursors of the modern regional polarisation of forms.

3.3 Possible precursors of modern polarisation of 'dialectal' forms

As early as 1852, a grammar of Maori disseminated views on what the writer perceived as a regional preference for particular constructions. Maunsell (1852:61) stated that *kei* was associated with the Waikato region in the following construction: *Kua riro kei te hoe mai*. 'He is gone to fetch it (the canoe).' He also gave an unclear example (p.57): *Kei te moe i ona karu*, 'he is indulging his eyes with sleep', stating that "it is perhaps confined to Waikato". Even if neither of these examples represented the pseudo-verbal, the association of the *kei te* sequence with the Waikato region would have registered in readers' minds.

Then in 1969, as noted above, Biggs attributed wide (though not exclusive) use of *kei te* (rather than *e...ana*) to speakers in the Eastern dialect region (see map over).



Map: Some North Island Tribal Areas

According to Biggs' now widely accepted assignment of the range for preferential use of *kei te*, Maunsell's Waikato is too narrow as the regional locus of *kei te*, and on the wrong side of the east-west dialect boundary. I have been unable to find other such written attributions, but I suspect that while the two given above are not in total agreement, both have contributed significantly to current perceptions concerning the area where use of this particular 'dialectal' feature is favoured most.

This exemplifies what I see as one of the two most important factors in contemporary dialect awareness. I think it likely that for most living speakers of Maori (including many native speakers), what they have read (or learned from others who have read) about the language, has contributed as much to their notions of other dialects as have their own observations.

In addition to the influence of written descriptions of language use, it seems likely to me that past military alliances among the tribes played no mean part in the adoption of particular expressions as solidarity markers between aligned groups, and that bitter and sometimes prolonged conflicts provided an equally strong disincentive to the use of other expressions regarded (at the time or now, accurately or not) as characterising a non-friendly group.

While it would not be easy to totally eradicate out-of-favour words or phrases from general speech, avoiding and replacing them in greetings and other small talk would probably be manageable. Most living Maori Northerners with any degree of interest in the language will confidently identify *kei te* as 'Ngaati Porou' (by which is often meant the whole Eastern region of the North Island). The only native speaking Northerners I have heard use it much (other than in a small set of lexicalised adjectival predicates) are school teachers who have taught elsewhere in the country.

Among themselves Maori are still very much tribal people, and intertribal clashes have probably never been quickly forgotten, least of all those most recent. Military incursions up until about the 1820s by Nga Puhi equipped with firearms firmly established the Northerners as the common enemy of both Waikato and the East Coast tribes (as well as other central North Island groups), the wholesale slaughter of that period eclipsing anything suffered previously at the hands of traditionally armed adversaries.

So while less publicised linguistic features than *kei te* and *e...ana*, along with topographic obstacles, may justify the placing of Waikato and the North together in the Western dialect area, if the geographic border status of Waikato (to a very limited extent), and the most recent and costly intertribal clashes in particular, are taken into account, we should not be surprised to find a higher proportion of *kei te* in modern Waikato texts than in those from the North.

A quick count on a recently published Waikato text (Jones & Biggs 1995) yields a ratio for *e...ana* to *kei te* of 24:1. Although this is not significantly lower than the 25:1 ratio for the Northern corpus (in Table 1), it must be remembered that half the Northern occurrences came from mobile school teachers.

So in answer to question 3, differences between the relative distribution of these two forms in earlier as opposed to modern texts from the Eastern and Western dialect areas, considered alongside well known military allegiances within both suggest that *e...ana* has probably always been much more widely used than *kei te* in both areas, perhaps particularly so in relative clauses, but following intertribal conflicts of the early 1800s *kei te* has been nurtured as a solidarity marker in the east and somewhat shunned in the west.

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